College of Agriculture

Overview

Purdue Agriculture is one of the world's leading colleges that offers food, agricultural, and natural resources programs. We train the next generation, who will drive innovation and discovery to reshape life sciences, biosecurity, the environment, agriculture, and the food system. Purdue Agriculture graduates are in great demand. During the past two decades, more than 90 percent of our graduates were employed or were enrolled in graduate or professional schools within three months of graduation.

Undergraduate Degree

Your undergraduate program will blend courses and experiences in your major with preparation in the life and physical sciences, written and oral communication, social sciences and humanities, multicultural awareness, and international understanding. Professional work experiences, leadership development, participation in student organizations, study abroad, and directed research can add to your professional development.

Graduate Degree

Your master's or doctoral program will be specialized and flexible to prepare you to meet your professional objectives. You'll find that we offer a growing number of multidisciplinary graduate degree programs, using directed experiences and courses from faculty members in one or more Purdue departments or colleges. Business and industry, government, and academic institutions throughout the world recruit our graduates for leading positions.

Admissions

College of Agriculture Undergraduate Admissions website

Admission to Teacher Education

Teacher Education Program website

Advising

<table>
<thead>
<tr>
<th>Department</th>
<th>Contact</th>
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</thead>
<tbody>
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<td>Landscape Architecture - Sean Rotar</td>
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Contact Information

College of Agriculture
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Phone: 765-494-8470

College of Agriculture Administration

About Agricultural Administration

Purdue University's College of Agriculture is one of the world's leading colleges of agricultural, food, life, and natural resource sciences. As a land-grant institution, we are committed to preparing our students to make a difference, wherever their careers take them; stretching the frontiers of science to find solutions to some of our most pressing global challenges; and, through Purdue Extension and engagement programs, helping the people of Indiana, the nation and the world improve their lives and livelihoods.

Faculty Information

College of Agriculture Academic Programs Website

Contact Information

College of Agriculture
615 West State Street
West Lafayette, IN 47907-2053
Email: exp@purdue.edu
Phone: 765-494-8470

Interdisciplinary Agriculture, BS  Students are not admitted directly into this major. See your advisor for more information.

Baccalaureate

Natural Resources and Environmental Science: Air Quality Concentration, BS

About the Program

Natural Resources and Environmental Science (NRES) is an interdisciplinary program that combines classes in the biophysical sciences with classes in environmental policy to develop graduates who are well-equipped to deal with the environmental challenges of the 21st century. Students can choose from one of five concentration areas: air quality, environmental policy and analysis, land resources, water quality, or emerging environmental challenges. NRES graduates work in an exciting variety of
environmentally related careers in the public and private sector, including state and federal agencies, consulting firms and non-profits.

Students in the Air Quality Concentration choose 21 credit hours of course work in atmospheric sciences, climate and air pollution.

Natural Resources and Environmental Science Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (106-107 credits)

Required Major Courses (10 credits)

- NRES 12500 - Environmental Science And Conservation
- NRES 20000 - Introduction To Environmental Careers
- NRES 25500 - Soil Science
- NRES 23000 - Survey Of Meteorology or
- AGRY 33500 - Weather And Climate

Other Departmental /Program Course Requirements (96-97 credits)

(See Advising Resources)

- AGEC 40600 - Natural Resource And Environmental Economics
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12200 - Introduction To Natural Resources And Environmental Science Academic Programs
- AGRY 43100 - Atmospheric Thermodynamics or
- EAPS 42100 - Atmospheric Thermodynamics
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- CHM 25700 - Organic Chemistry
- EAPS 32000 - Physics Of Climate
- FNR 21000 - Natural Resource Information Management
- FNR 35700 - Fundamental Remote Sensing
MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
MA 16020 - Applied Calculus II
POL 22300 - Introduction To Environmental Policy
STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)
ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
ENGL 10800 - Accelerated First-Year Composition or
HONR 19903 - Interdisciplinary Approaches In Writing

COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
COM 21700 - Science Writing And Presentation or
EDPS 31500 - Collaborative Leadership: Interpersonal Skills

Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
Ecology Selective - Credit Hours: 2.00
Ecology Selective - Credit Hours: 3.00
Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 9.00
Air Quality Selective - Credit Hours: 12.00
Microeconomics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
Humanities or Social Science Selective - Credit Hours: 3.00
Humanities or Social Science Selective - Credit Hours: 3.00
Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

Electives (13-14 credits)

College of Agriculture & University Level Requirements

2.0 GPA required for Bachelor of Science degree
32 Upper division credits taken from Purdue
9 credits International Understanding
3 credits Multicultural Awareness
9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

Human Cultures Humanities
Human Cultures Behavioral/Social Science
Information Literacy
Science #1
Science #2
Science, Technology, and Society
Written Communication
Oral Communication
Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.
Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Requirements

Click here for Natural Resources and Environmental Science: Air Quality Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12200 - Introduction To Natural Resources And Environmental Science Academic Programs
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I
- NRES 12500 - Environmental Science And Conservation
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

13-14 Credits

Spring 1st Year

- BIOL 11000 - Fundamentals Of Biology I
- CHM 11200 - General Chemistry
- MA 16020 - Applied Calculus II
- Elective - Credit Hours: 4.00
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

17 Credits

Fall 2nd Year

- CHM 25700 - Organic Chemistry
- NRES 25500 - Soil Science ♦
- STAT 30100 - Elementary Statistical Methods
- BIOL 11100 - Fundamentals Of Biology II or
• BTNY 11000 - Introduction To Plant Science

• Microeconomics Selective - Credit Hours: 3.00

17 Credits

Spring 2nd Year

• NRES 20000 - Introduction To Environmental Careers
• POL 22300 - Introduction To Environmental Policy

• NRES 23000 - Survey Of Meteorology or
• AGRY 33500 - Weather And Climate

• Ecology Selective - Credit Hours: 2.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

• FNR 35700 - Fundamental Remote Sensing

• AGRY 43100 - Atmospheric Thermodynamics or
• EAPS 42100 - Atmospheric Thermodynamics

• Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 6.00
• Ecology Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

• EAPS 32000 - Physics Of Climate
• FNR 21000 - Natural Resource Information Management
• Air Quality Concentration Selective - Credit Hours: 3.00
• UCC Humanities Selective - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

15 Credits

Fall 4th Year

• AGEC 40600 - Natural Resource And Environmental Economics

• Air Quality concentration selective - Credit Hours: 3.00
Biochemistry, biology, chemistry, mathematics, physics, or statistics selectives - Credit Hours: 3.00
Humanities or Social Science Selective - Credit Hours: 3.00
Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

Air Quality Concentration Selectives - Credit Hours: 6.00
Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
Electives - Credit Hours: 3.00-4.00

12-13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Natural Resources and Environmental Science: Emerging Environmental Challenges Concentration, BS

About the Program

Natural Resources and Environmental Science (NRES) is an interdisciplinary program that combines classes in the biophysical sciences with classes in environmental policy to develop graduates who are well-equipped to deal with the environmental
challenges of the 21st century. Students can choose from one of five concentration areas: air quality, environmental policy and analysis, land resources, water quality, or emerging environmental challenges. NRES graduates work in an exciting variety of environmentally related careers in the public and private sector, including state and federal agencies, consulting firms and non-profits.

Students selecting Emerging Environmental Challenges work with the faculty directors to build a meaningful plan of study in an environmental focus area of their choosing.

Natural Resources and Environmental Science Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (10 credits)

Required Major Courses (10 credits)

- NRES 12500 - Environmental Science And Conservation (satisfies Science, Technology & Society Selective for core)
- NRES 20000 - Introduction To Environmental Careers
- NRES 25500 - Soil Science
- NRES 23000 - Survey Of Meteorology or
- AGRY 33500 - Weather And Climate

Other Departmental /Program Course Requirements (95-96 credits)

- AGEC 40600 - Natural Resource And Environmental Economics
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12200 - Introduction To Natural Resources And Environmental Science Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- CHM 25700 - Organic Chemistry
- FNR 21000 - Natural Resource Information Management
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- POL 22300 - Introduction To Environmental Policy
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)
• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation (satisfies Oral Communication for core) or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
• Ecology Selective - Credit Hours: 2.00
• Ecology Selective - Credit Hours: 3.00
• Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 9.00
• Emerging Environmental Challenges Selective - Credit Hours: 20.00
• Microeconomics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

Electives (14-15 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.
Additional Requirements

Click here for Natural Resources and Environmental Science: Emerging Environmental Challenges Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12200 - Introduction To Natural Resources And Environmental Science Academic Programs
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I
- NRES 12500 - Environmental Science And Conservation
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

13-14 Credits

Spring 1st Year

- BIOL 11000 - Fundamentals Of Biology I
- CHM 11200 - General Chemistry
- MA 16020 - Applied Calculus II
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Elective - Credit Hours: 4.00

17 Credits

Fall 2nd Year

- CHM 25700 - Organic Chemistry
- NRES 25500 - Soil Science♦
- STAT 30100 - Elementary Statistical Methods
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- Microeconomics Selective - Credit Hours: 3.00

17 Credits
Spring 2nd Year

- NRES 20000 - Introduction To Environmental Careers
- POL 22300 - Introduction To Environmental Policy
- NRES 23000 - Survey Of Meteorology or
  AGRY 33500 - Weather And Climate
- Ecology Selective - Credit Hours: 2.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 6.00
- Emerging Environmental Challenges Selective - Credit Hours: 6.00
- Ecology Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- FNR 21000 - Natural Resource Information Management
- Emerging Environmental Challenges Selective - Credit Hours: 6.00
- UCC Humanities Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AGEC 40600 - Natural Resource And Environmental Economics
- Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 3.00
- Emerging Environmental Challenges Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Emerging Environmental Challenges Selective - Credit Hours: 5.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Electives - Credit Hours: 4.00-5.00

12-13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Natural Resources and Environmental Science: Environmental Policy and Analysis Concentration, BS

About the Program

Natural Resources and Environmental Science (NRES) is an interdisciplinary program that combines classes in the biophysical sciences with classes in environmental policy to develop graduates who are well-equipped to deal with the environmental challenges of the 21st century. Students can choose from one of five concentration areas: air quality, environmental policy and analysis, land resources, water quality, or emerging environmental challenges. NRES graduates work in an exciting variety of environmentally related careers in the public and private sector, including state and federal agencies, consulting firms and non-profits.

Students in the Environmental Policy and Analysis Concentration choose 21 credit hours of course work in planning, policy and sustainability.

Natural Resources and Environmental Science Website

Degree Requirements
120 Credits Required

Departmental/Program Major Courses (106-107 credits)

Required Major Courses (10 credits)

- NRES 12500 - Environmental Science And Conservation
- NRES 20000 - Introduction To Environmental Careers
- NRES 25500 - Soil Science

- NRES 23000 - Survey Of Meteorology or
- AGRY 33500 - Weather And Climate (satisfies Science, Technology & Society Selective for core)

Other Departmental /Program Course Requirements (96-97 credits)

- AGEC 40600 - Natural Resource And Environmental Economics
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12200 - Introduction To Natural Resources And Environmental Science Academic Programs
- BIOL 11000 - Fundamentals Of Biology I

- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science

- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- CHM 25700 - Organic Chemistry
- FNR 21000 - Natural Resource Information Management
- FNR 37500 - Human Dimensions of Natural Resource Management
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- PHIL 29000 - Environmental Ethics
- POL 22300 - Introduction To Environmental Policy
- POL 32700 - Global Green Politics
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Written or Oral Communication Selective (20000+ level)- Credit Hours: 3.00
- Ecology Selective - Credit Hours: 2.00
- Ecology Selective - Credit Hours: 3.00
- Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 9.00
- Environmental Policy and Analysis Selective - Credit Hours: 12.00
- Microeconomics Selective - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

Electives (13-14 credits)

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Requirements

Click here for Natural Resources and Environmental Science: Environmental Policy and Analysis Supplemental Information

Program Requirements

Fall 1st Year
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12200 - Introduction To Natural Resources And Environmental Science Academic Programs
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I
- NRES 12500 - Environmental Science And Conservation
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

13-14 Credits

Spring 1st Year

- BIOL 11000 - Fundamentals Of Biology I
- CHM 11200 - General Chemistry
- MA 16020 - Applied Calculus II
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Elective - Credit Hours: 4.00

17 Credits

Fall 2nd Year

- CHM 25700 - Organic Chemistry
- NRES 25500 - Soil Science ♦
- STAT 30100 - Elementary Statistical Methods
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- Microeconomics Selective - Credit Hours: 3.00

17 Credits

Spring 2nd Year

- NRES 20000 - Introduction To Environmental Careers
- POL 22300 - Introduction To Environmental Policy
- NRES 23000 - Survey Of Meteorology or
- AGRY 33500 - Weather And Climate
- Ecology Selective - Credit Hours: 2.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- PHIL 29000 - Environmental Ethics
- POL 32700 - Global Green Politics
- Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 3.00
- Ecology Selective - Credit Hours: 3.00
- UCC Humanities Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- FNR 21000 - Natural Resource Information Management
- FNR 37500 - Human Dimensions of Natural Resource Management
- Environmental Policy and Analysis Concentration Selective - Credit Hours: 3.00
- Humanities or Social Sciences Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AGEC 40600 - Natural Resource And Environmental Economics
- Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 6.00
- Environmental Policy and Analysis Concentration Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Environmental Policy and Analysis Concentration Selective - Credit Hours: 6.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00-4.00

12-13 Credits

Notes
2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Natural Resources and Environmental Science: Land Resources Concentration, BS

About the Program

Natural Resources and Environmental Science (NRES) is an interdisciplinary program that combines classes in the biophysical sciences with classes in environmental policy to develop graduates who are well-equipped to deal with the environmental challenges of the 21st century. Students can choose from one of five concentration areas: air quality, environmental policy and analysis, land resources, water quality, or emerging environmental challenges. NRES graduates work in an exciting variety of environmentally related careers in the public and private sector, including state and federal agencies, consulting firms and nonprofits.

Students in the Land Resources Concentration choose 22 credit hours of course work in soil science, land use and conservation.

Natural Resources and Environmental Science Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (107-108 credits)

Required Major Courses (10 credits)
- NRES 12500 - Environmental Science And Conservation (satisfies Science, Technology & Society Selective for core)
- NRES 20000 - Introduction To Environmental Careers
- NRES 25500 - Soil Science

- NRES 23000 - Survey Of Meteorology or
- AGRY 33500 - Weather And Climate

Other Departmental/Program Course Requirements (97-98 credits)

- AGEC 40600 - Natural Resource And Environmental Economics
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12200 - Introduction To Natural Resources And Environmental Science Academic Programs
- AGRY 38500 - Environmental Soil Chemistry
- AGRY 45000 - Soil Conservation and Water Management
- BIOL 11000 - Fundamentals Of Biology I

- BIOL 11100 - Fundamentals Of Biology II or
- BTYN 11000 - Introduction To Plant Science

- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- CHM 25700 - Organic Chemistry
- FNR 21000 - Natural Resource Information Management
- FNR 37500 - Human Dimensions of Natural Resource Management
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- POL 22300 - Introduction To Environmental Policy
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation (satisfies Oral Communication for core) or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- Ecology Selective - Credit Hours: 2.00
- Ecology Selective - Credit Hours: 3.00
- Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 9.00
- Land Resources Selective - Credit Hours: 12.00
- Microeconomics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

Electives (12-13 credits)

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Requirements

Click here for Natural Resources and Environmental Science: Land Resources Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12200 - Introduction To Natural Resources And Environmental Science Academic Programs
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I
- NRES 12500 - Environmental Science And Conservation
- ENGL 10600 - First-Year Composition or
ENGL 10800 - Accelerated First-Year Composition or
HONR 19903 - Interdisciplinary Approaches In Writing

13-14 Credits

Spring 1st Year

- BIOL 11000 - Fundamentals Of Biology I
- CHM 11200 - General Chemistry
- MA 16020 - Applied Calculus II
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Elective - Credit Hours: 4.00

17 Credits

Fall 2nd Year

- CHM 25700 - Organic Chemistry
- NRES 25500 - Soil Science♦
- STAT 30100 - Elementary Statistical Methods
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- Microeconomics Selective - Credit Hours: 3.00

17 Credits

Spring 2nd Year

- NRES 20000 - Introduction To Environmental Careers
- POL 22300 - Introduction To Environmental Policy
- NRES 23000 - Survey Of Meteorology or
- AGRY 33500 - Weather And Climate
- Ecology Selective - Credit Hours: 2.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits
Fall 3rd Year

- AGRY 45000 - Soil Conservation and Water Management
- Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 6.00
- Ecology Selective - Credit Hours: 3.00
- Land Resources Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- FNR 21000 - Natural Resource Information Management
- FNR 37500 - Human Dimensions of Natural Resource Management
- UCC Humanities Selective - Credit Hours: 3.00
- Land Resources Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level)- Credit Hours: 3.00

15 Credits

Fall 4th Year

- AGEC 40600 - Natural Resource And Environmental Economics
- AGRY 38500 - Environmental Soil Chemistry
- Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 4th Year

- Land Resources Selective - Credit Hours: 6.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 2.00-3.00

11-12 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses
Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

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Natural Resources and Environmental Science: Water Quality Concentration, BS

About the Program

Natural Resources and Environmental Science (NRES) is an interdisciplinary program that combines classes in the biophysical sciences with classes in environmental policy to develop graduates who are well-equipped to deal with the environmental challenges of the 21st century. Students can choose from one of five concentration areas: air quality, environmental policy and analysis, land resources, water quality, or emerging environmental challenges. NRES graduates work in an exciting variety of environmentally related careers in the public and private sector, including state and federal agencies, consulting firms and non-profits.

Students in the Water Quality Concentration choose 19-21 credit hours of course work in hydrology, water quality and aquatic ecosystems.

Natural Resources and Environmental Science Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (106-107 credits)

Required Major Courses (10 credits)

- NRES 12500 - Environmental Science And Conservation (satisfies Science, Technology & Society Selective for core)
- NRES 20000 - Introduction To Environmental Careers
- NRES 25500 - Soil Science ♦
• NRES 23000 - Survey Of Meteorology or
• AGRY 33500 - Weather And Climate

Other Departmental /Program Course Requirements (96-97 credits)

• AGEC 40600 - Natural Resource And Environmental Economics
• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 12200 - Introduction To Natural Resources And Environmental Science Academic Programs
• AGRY 33700 - Environmental Hydrology
• BIOL 11000 - Fundamentals Of Biology I

• BIOL 11100 - Fundamentals Of Biology II or
• BTNY 11000 - Introduction To Plant Science

• CE 35500 - Engineering Environmental Sustainability
• CHM 11100 - General Chemistry
• CHM 11200 - General Chemistry
• CHM 25700 - Organic Chemistry
• FNR 20100 - Marine Biology
• FNR 21000 - Natural Resource Information Management
• MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
• MA 16020 - Applied Calculus II
• POL 22300 - Introduction To Environmental Policy
• STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)

• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
• Ecology Selective - Credit Hours: 2.00
• Ecology Selective - Credits Hours: 3.00
• Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 9.00
• Water Quality Selective - Credit Hours: 12.00
• Microeconomics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

Electives (13-14 credits)

College of Agriculture & University Level Requirements
- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

**University Core Requirements**

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

**Prerequisite Information:**

For current pre-requisites for courses, click here.

**Additional Requirements**

Click here for Natural Resources and Environmental Science: Water Quality Supplemental Information

**Program Requirements**

**Fall 1st Year**

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12200 - Introduction To Natural Resources And Environmental Science Academic Programs
- NRES 12500 - Environmental Science And Conservation
- MA 16010 - Applied Calculus I
- CHM 11100 - General Chemistry

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

13-14 Credits

**Spring 1st Year**
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11200 - General Chemistry
- MA 16020 - Applied Calculus II
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Elective - Credit Hours: 4.00

17 Credits

Fall 2nd Year

- CHM 25700 - Organic Chemistry
- NRES 25500 - Soil Science ♦
- STAT 30100 - Elementary Statistical Methods
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- Microeconomics Selective - Credit Hours: 3.00

17 Credits

Spring 2nd Year

- NRES 20000 - Introduction To Environmental Careers
- POL 22300 - Introduction To Environmental Policy
- NRES 23000 - Survey Of Meteorology or
- AGRY 33500 - Weather And Climate
- Ecology Selective - Credit Hours: 2.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- CE 35500 - Engineering Environmental Sustainability
- Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 6.00
- Ecology Selective - Credit Hours: 3.00
- Water Quality Selective - Credit Hours: 3.00
15 Credits

Spring 3rd Year

- AGRY 33700 - Environmental Hydrology
- FNR 21000 - Natural Resource Information Management
- UCC Humanities Selective - Credit Hours: 3.00
- Water Quality Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AGEC 40600 - Natural Resource And Environmental Economics
- FNR 20100 - Marine Biology
- Biochemistry, Biology, Chemistry, Mathematics, Physics, or Statistics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Water Quality Concentration Selectives - Credit Hours: 6.00
- Electives - Credit Hours: 3.00-4.00

12-13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course
The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

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Certificate

Deans Scholar Certificate

Selection criteria:

- All students who enter Purdue University College of Agriculture as recipients of the Board of Trustees Scholarship are encouraged to apply to the Dean's Scholars Program as are others fulfilling the following criteria:
  - 3.8/4.0 High School GPA and 1800 SAT/ACT 27 and above OR Valedictorian of high school
- First semester students will be asked to accept a Dean's Scholar status by May 15 and must accept the invitation prior to fall semester.
- Second semester freshmen, sophomores, and transfer students with 60 credits remaining at Purdue may apply if they have a GPA equal to or greater than 3.5. A written essay stating why the student is interested in being a Dean's Scholar is part of the formal application process. Review of applications will be administered by the Office of Academic Programs and the Departmental Honors Coordinator from the department in which the student is enrolled.

Requirements for the Certificate

- AGR 29000 - Special Topics In Agriculture - 1 credit hour honors course seminar including participation in the Dean's Scholars Learning Community
- Honors Coursework - (12 credit hours) https://honors.purdue.edu/current-students/honors-courses/index.php
- Undergraduate research (thesis) or Scholarly Project - engagement in a sustained project or creative project leading to new knowledge

Notes

- For more information, please visit the Dean's Scholars Website
- Scholarly (Creative) Projects: https://honors.purdue.edu/current-students/scholarly-project/index.php
- Scholarly/creative project definitions (not proposal/completion process information unless also completing project for Honors College): https://honors.purdue.edu/assets/other/doc/scholarly-project-faqs.pdf
- GPA requirement to earn Dean's Scholars distinction at graduation is 3.25 or above.

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**Leadership Development Program Certificate**

**Everyone has leadership potential. Let LDCP help you tap yours!**

In LDCP you will gain leadership experience tailored to you and your situation, enjoy one-on-one coaching, and develop the "soft skills" employers today are looking for. And when you complete LDCP and earn your certificate, it will appear on your academic transcript.

You are eligible for LDCP if you:

- Are enrolled as an undergraduate in the Purdue College of Agriculture
- Have at least three semesters remaining on campus before graduation
- Remain in good academic standing

**Leadership Development Certificate Program**

**Program's Philosophy**

The following philosophy about leadership was adopted by the College of Agriculture faculty on August 25, 2005. These beliefs serve as the foundation for the Leadership Development Certificate Program.

We believe that all students can and should exercise leadership. Leadership does not require formal authority or position and can be practiced by anyone interested in making a difference in his/her family, workplace, and community.

Leadership is a process of people working together toward common goals that bring about positive change. The effectiveness of leadership is based on trusting relationships. Through this exchange, people influence one another's thoughts and actions. By incorporating the diverse skills and viewpoints of others, individuals are empowered and group energy is mobilized to pursue collective goals. Decisions are made and actions are taken.

The development of leadership begins with personal initiative and an understanding of one's passions, motivations, strengths, limitations, and personal values. This also includes an understanding of the ethical nature of leadership as it relates to one's character and a commitment to act with trustworthiness, respect, responsibility, fairness, caring, and citizenship.

This process of self-discovery is ongoing and requires a commitment to lifelong learning through getting involved, reflecting on the experience, and stretching oneself to meet new challenges. The purpose of leadership development is not only for the benefit of oneself, but also to enable one to be a more effective leader in addressing important issues that affect oneself and others.

**Leadership Competencies**

The Leadership Development Certificate Program includes four general areas of leadership development and 13 specific skill areas. The faculty expects you to develop at least one skill in each of the four areas during this program.

- Personal leadership development
  - Understands leadership
  - Increases self-awareness
  - Practices ethical behavior
Coaches

After you submit a Statement of Intent and a resume, you will be matched with a faculty or administrative professional staff member to guide and support you on your leadership journey. S/he will help you identify your leadership goals, connect you with campus resources, and encourage you to stretch yourself beyond your comfort zone by seeking out new leadership opportunities. The program, however, is yours, and the quality of your learning experiences is up to you.

Requirements for the Certificate

1. Submit your Statement of Intent along with your résumé. (Link to embed for Statement of Intent: https://ag.purdue.edu/oap/idcp/Pages/studentapplication.html)
2. Contact the coach who has been assigned to you.
4. Complete a Personal Development Plan. (Link to embed for PDP: https://ag.purdue.edu/oap/idcp/Documents/Personal%20Development%20Plan%20Submission%20Form.pdf) for how you will enhance your leadership development in each of the following leadership pillars (personal, interpersonal, group/organization, and community leadership development).
5. Complete required badges for all four leadership development pillars (5 points required for each pillar) for a minimum of 20 points total via Passport to complete the program. Each leadership activity is eligible for one, two or three points and is achieved when the coach approves the required written reflections submitted by the students via Passport. Badges for each of the four leadership pillars are achieved when written reflections are approved by coaches via Passport.
   a. Earn five points...
   b. Earn...
   c. Earn...
   d. Earn...
6. Develop an electronic portfolio via Passport that documents your progress on your goals including your personal reflections for each leadership activity and badge completion for the program.

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Minor

International Studies in Agriculture Minor

Requirements for the Minor (15 credits)

A. Basic Requirements

- Credit in a foreign language through the fourth course (and one conversation course, if offered).
- In most cases, the language studied must be one spoken in the country or region in which the overseas experience is completed.
- Students whose overseas experience is an English-speaking country may meet the language requirement by studying any foreign language.
- Students whose overseas experience is in a country whose language is not taught at Purdue may substitute any other language spoken in that region of the world.
- Fifteen credits of coursework with an international focus (See Below).
- At least six credits of this coursework should focus on the country/region of the student's overseas experience.
- Additional language courses can be used only if they are nonlinguistic in nature (i.e., literature, culture, etc).
- A minimum of six credits should be completed outside of the College of Agriculture.
- At least eight weeks abroad participating in an approved study abroad, cooperative work experience, internship, or cultural exchange.
- Completion and presentation of a summary paper in a seminar format which assimilates all components of the International Studies Minor.

B. Selective Courses (15 credits)

- AGEC 25000 - Economic Geography Of World Food And Resources
- AGEC 34000 - International Economic Development
- AGEC 45000 - International Agricultural Trade
- AGEC 49800 - Special Problems - Afghanistan Development Challenges
- ANTH 10000 - Introduction To Anthropology
- ANTH 20500 - Human Cultural Diversity
- ANTH 39200 - Selected Topics In Anthropology
- CLCS 23010 - Survey Of Greek Literature In Translation
- CLCS 23100 - Survey Of Latin Literature
- CLCS 23200 - Classical Roots Of English Words
- CLCS 23300 - Comparative Mythology
- CLCS 23500 - Introduction To Classical Mythology
- CLCS 23700 - Gender And Sexuality In Greek And Roman Antiquity
- CLCS 23800 - The Tragic Vision
- CLCS 23900 - The Comic Vision
- CLCS 33900 - Literature And The Law
- ECON 37000 - International Trade
- ECON 46600 - International Economics
- ENGL 26600 - World Literature: From The Beginnings To 1700 A.D.
- ENGL 26700 - World Literature: From 1700 A.D. To The Present
• HIST 24000 - East Asia And Its Historic Tradition
• HIST 24100 - East Asia In The Modern World
• HIST 24300 - South Asian History And Civilizations
• HIST 24500 - Introduction To The Middle East History And Culture
• HIST 24600 - Modern Middle East And North Africa
• HIST 27100 - Introduction To Colonial Latin American History (1492-1810)
• HIST 27200 - Introduction To Modern Latin American History (1810 To The Present)
• HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century
• HIST 30200 - Historical Topics
• HIST 32300 - German History
• HIST 32400 - Modern France
• HIST 34000 - Modern China
• HIST 34100 - History Of Africa South Of The Sahara
• HIST 34200 - Africa And The West
• HIST 34300 - Traditional Japan
• HIST 34400 - History Of Modern Japan
• HIST 40800 - Dictatorship And Democracy: Europe 1919-1945
• HIST 43900 - Communist China
• HIST 47200 - History Of Mexico
• HIST 59500 - The Holocaust And Genocide
• PHIL 11000 - Introduction To Philosophy
• PHIL 23000 - Religions Of The East
• PHIL 23100 - Religions Of The West
• POL 13000 - Introduction To International Relations
• POL 14100 - Governments Of The World
• POL 23100 - Introduction To United States Foreign Policy
• POL 23200 - Contemporary Crises In International Relations
• POL 23500 - International Relations Among Rich And Poor Nations
• POL 23700 - Modern Weapons And International Relations
• POL 32700 - Global Green Politics
• POL 34500 - West European Democracies In The Post-Industrial Era
• POL 34800 - East Asian Politics
• POL 43300 - International Organization
• POL 43400 - United States Foreign Policy, Central America And The Caribbean
• POL 43500 - International Law

Notes

• Credits earned via a Purdue approved Study Abroad Program can be used as long as they fulfill the basic requirements listed above. Namely, focus on the country/region, etc.
• Departmental permission is required to enroll in this minor. Please contact Tim Kerr in Room 121 of the Agricultural Administration Building.
• Students must have their Plan of Study approved a minimum of six months prior to graduation.

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Natural Resources and Environmental Science Minor

Requirements for the Minor (15 credits)

Required Course (3 credits)

- NRES 12500 - Environmental Science And Conservation

Area Courses - Choose at least One from each area: (12 credits)

General Environmental Science Emphasis

- FNR 21000 - Natural Resource Information Management
- NRES 23000 - Survey Of Meteorology
- NRES 25500 - Soil Science
- POL 22300 - Introduction To Environmental Policy

Ecology Emphasis

- AGRY 34900 - Soil Ecology
- BIOL 48300 - Great Issues: Environmental And Conservation Biology
- ENTM 31100 - Insect Ecology

Policy and Economic Emphasis

- AGEC 40600 - Natural Resource And Environmental Economics
- FNR 37500 - Human Dimensions of Natural Resource Management
- POL 32700 - Global Green Politics

Land Resources Emphasis

- ABE 32500 - Soil And Water Resource Engineering
- AGRY 33700 - Environmental Hydrology
- ASM 23600 - Environmental Systems Management
- NRES 38500 - Environmental Soil Chemistry

Sustainability Emphasis

- AD 39700 - Sustainability In The Built Environment
- BCM 51000 - Topics In Environmentally Sustainable Construction, Design And Development
- CE 35500 - Engineering Environmental Sustainability

Water Quality Emphasis
• ABE 32500 - Soil And Water Resource Engineering
• AGRY 12000 - Water And Food Security
• AGRY 33700 - Environmental Hydrology

Note

• Department permission is not required to enroll in this minor.

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Sustainable Environments Minor

Requirements for the Minor (15 credits)

Required Courses (3 credits)

• NRES 12500 - Environmental Science And Conservation

Selective Courses (12 credits)

• AD 39700 - Sustainability In The Built Environment
• ASM 23600 - Environmental Systems Management
• BCM 51000 - Topics In Environmentally Sustainable Construction, Design And Development
• BIOL 48300 - Great Issues: Environmental And Conservation Biology
• CE 35500 - Engineering Environmental Sustainability
• EAPS 30100 - Oil !
• EAPS 32700 - Climate, Science And Society
• EAPS 37500 - Great Issues - Fossil Fuels, Energy And Society
• FNR 37500 - Human Dimensions of Natural Resource Management
• FNR 47000 - Fundamentals Of Planning
• FNR 48800 - Global Environmental Issues
• HORT 44200 - Sustainability In The Managed Landscape
• POL 32700 - Global Green Politics

Note

• Departmental permission is not required to enroll in this minor.

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Pre-Program

Plant Studies - Exploratory (Pre)

About the Program

This pre-major is intended to serve as an optional entry point/portal for students interested in life sciences and enrolling in the Purdue College of Agriculture with an interest in plants but who are uncertain about the differences between all the majors and career options. As a Plant Studies - Exploratory major, students will make progress toward their Bachelor of Science degree and engage the numerous experiential learning opportunities (e.g. learning communities, clubs, leadership opportunities, Study Abroad, etc.) offered in the College. Students will have up to 4-semesters or 60 total credits to explore the various majors before selecting one that best meets their educational and career interests. It is anticipated that most students will likely select a major by the end of their first two semesters.

Degree Requirements

37-40 Credits Required

Departmental/Program Major Courses (2.5 credits)

Required Major Courses (2.5 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12500 - Introduction To Plant Science
- AGR 29000 - Special Topics In Agriculture -Study Plants at Purdue Learning Community

Other Departmental/Program Course Requirements (31.5-34.5 credits)

- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- MA 16010 - Applied Calculus I ♦

- BIOL 11000 - Fundamentals Of Biology I or
- BTNY 11000 - Introduction To Plant Science

- CHM 11100 - General Chemistry or
- CHM 11500 - General Chemistry

- CHM 11200 - General Chemistry ♦ or
- CHM 11600 - General Chemistry ♦

- MA 16020 - Applied Calculus II or
- STAT 30100 - Elementary Statistical Methods
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Selective - Exploratory Plant Science - Credit Hours: 1.00-3.00

Electives (3 credits)

Additional Information

Exploratory Selectives for Plant Sciences:

- AGRY 10500 - Crop Production
- AGRY 12300 - Genetics And Society
- AGRY 28500 - World Crop Adaptation And Distribution
- BTNY 11100 - Principles Of Plant Biology
- BTNY 20700 - The Microbial World
- BTNY 28500 - Plants And Civilization
- FNR 23000 - The World's Forests And Society
- HORT 10100 - Fundamentals Of Horticulture
- HORT 11100 - Survey Of Turfgrass Culture
- HORT 12100 - Medicine In The Garden
- LA 16100 - Land And Society
- LA 16600 - History And Theory Of Landscape Architecture
- SFS 31200 - Urban Agriculture

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12500 - Introduction To Plant Science
- AGR 29000 - Special Topics In Agriculture - Study Plants at Purdue Learning Community (Credit Hours: 1.00)
- MA 16010 - Applied Calculus I ♦
- BIOL 11000 - Fundamentals Of Biology I or
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry or
• CHM 11500 - General Chemistry

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

15.5-17.5 Credits

Spring 1st Year

• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness

• CHM 11200 - General Chemistry ♦ or
• CHM 11600 - General Chemistry ♦

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• MA 16020 - Applied Calculus II or
• STAT 30100 - Elementary Statistical Methods

• Selective - Exploratory Plant Science (Credit Hours: 1.00-3.00)
• Elective - Credit Hours 3.00

16-19 Credits

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Pre-Environmental Studies

The Pre-Environmental Studies program of study is intended to serve as a portal for students entering Purdue with an interest in environmental studies who are undecided as to the specific program of study in which they want to enroll. Students enrolled in Pre-Environmental Studies are advised about which courses to take in their first year to enable them to transfer into the major they choose at the end of that year.

Fall 1st Year
13-14 Credits

Spring 1st Year

- CHM 11200 - General Chemistry
- MA 16020 - Applied Calculus II

- BIOL 11000 - Fundamentals Of Biology I or
- BTNY 11000 - Introduction To Plant Science

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Elective - Credit Hours: 3.00 - 4.00

16 - 17 Credits

Disclaimer

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Pre-Veterinary Medicine

About the Program

Preveterinary medicine is not really a major, but rather is a collection of prerequisites for admission to Purdue's College of Veterinary Medicine. Students may enter the College of Agriculture in this category, but later must pick a major to pursue. Students pursuing a wide variety of curricula may apply and be admitted to a veterinary college.

The preveterinary medicine curriculum includes courses that are required for admission to the Doctor of Veterinary Medicine degree program offered by the Purdue College of Veterinary Medicine. This program of study, coordinated by the College of Agriculture Office of Academic Programs, emphasizes the biological and physical sciences that are foundations for successful study of veterinary medicine. Also, the curriculum includes courses in communication and the social sciences.
Degree Requirements

OAP • Pre-Professional

93 Credits Required

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12400 - Introduction To College Of Agriculture Pre Veterinary Medicine Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11500 - General Chemistry
- MA 16010 - Applied Calculus I ♦
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

15-16 Credits

Spring 1st Year

- BIOL 11100 - Fundamentals Of Biology II
- CHM 11600 - General Chemistry ♦
- MA 16020 - Applied Calculus II
- VM 10200 - Careers In Veterinary Medicine
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

15 Credits

Fall 2nd Year

- ANSC 22100 - Principles Of Animal Nutrition
- BIOL 23100 - Biology III: Cell Structure And Function
- BIOL 23200 - Laboratory In Biology III: Cell Structure And Function
- CHM 25500 - Organic Chemistry
• CHM 25501 - Organic Chemistry Laboratory
• UCC Science, Technology and Society Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

• AGRY 32000 - Genetics
• AGRY 32100 - Genetics Laboratory
• CHM 25600 - Organic Chemistry
• CHM 25601 - Organic Chemistry Laboratory
• Agricultural Selective - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits

Fall 3rd Year

• BCHM 30700 - Biochemistry
• PHYS 22000 - General Physics
• STAT 30100 - Elementary Statistical Methods
• Agricultural Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

• BIOL 22100 - Introduction To Microbiology
• PHYS 22100 - General Physics
• Humanities or Social Science Selective - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00

14 Credits

Notes

• Official and complete prerequisite lists are in the course catalog
• The incomplete listing presented here regards this program and provides an idea of course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.
For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

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Department of Agricultural and Biological Engineering

Overview

Welcome to the Department of Agricultural & Biological Engineering at Purdue University. Our mission is to prepare students, citizens, and industry for the future through innovative education and extension/outreach programs and the discovery of knowledge.

Our cross-disciplinary strengths include academic and research programs in agriculture, biology, and engineering, as well as dual degree programs. Agricultural and Biological Engineering offers three degree programs, including two engineering programs: Bachelor of Science in Agricultural Engineering (BSAGE) and Bachelor of Science in Biological Engineering (BSBE), and one agriculture program: Agricultural Systems Management, BS. ABE's degree programs also offer multiple majors and concentrations. The job market remains strong for our graduates who have excellent career opportunities, and demand for our graduates is very high.

Our faculty, students and staff are pursuing cutting-edge research that improves quality of life as well as advances scientific and engineering frontiers. Our extension programs are helping citizens of Indiana and beyond improve their lives.

Agricultural Systems Management

The Agricultural Systems Management program prepares graduates to develop and manage technology-intensive agricultural production and processing systems. ASM graduates are problem solvers. They benefit from a diverse applied agricultural curriculum that includes opportunities for extensive career-related experience at home and abroad.

Biological Engineering

This program deals with the applications of basic scientific and engineering principles to the design, development and operation of large scale manufacture of food and biologically-based products. Such products are environmentally friendly, renewable and represent a future wave of consumer demand for better health and environment. In addition to learning the engineering aspects of food and biological processing, you will also learn the basic principles in biochemistry and food sciences.

Dual Degree programs with Biological Engineering and Biochemistry or Pharmaceutical Sciences are also offered - these programs require an additional year of courses leading to two degrees.
**Agricultural Engineering - emphasis in Environmental & Natural Resources Engineering**

This emphasis area prepares engineers with specialized expertise to design and analyze new and environmentally sound ways to produce food and fiber while conserving our natural resources. Students gain expertise in areas such as watershed management, geographic information systems, computer-based watershed modeling, and contaminant transport models, and soil and water conservation engineering practices.

**Agricultural Engineering - emphasis in Machine Systems Engineering**

This emphasis area prepares students with a background in mechanical design, hydraulics, instrumentation and control, finite element analysis, electronics and sensors to design, develop, analyze and operate machines and systems for agricultural and biological products and processes, materials handling, construction and mining, forestry, lawn- and ground-care, and food and fiber production and processing.

**Faculty Information**

**Department of Agricultural and Biological Engineering Website**

**Contact Information**

Purdue University

Agricultural and Biological Engineering

225 South University Street
West Lafayette, IN 47907-2093
Phone: (765) 494-1162
Fax: (765) 496-1115
www.purdue.edu/abe

**Undergraduate Information**

For undergraduate programs and information, please see the College of Agriculture, or the Department of Agricultural and Biological Engineering page.

**Graduate Information**

For Graduate Information please see Agricultural and Biological Engineering Graduate Program Information.

**Baccalaureate**

**Agricultural Engineering, BSAGE**

**About the Program**

The Agricultural Engineering program is accredited by the Engineering Accreditation Commission of ABET.
Agricultural engineers apply their knowledge of agricultural systems, natural resources, and engineering to equipment design and assure environmental compatibility of practices used by production agriculture. The Agricultural Engineering curriculum offers great breadth, with specialization choices in machine systems engineering and environmental and natural resources engineering. Subject areas include computer-aided engineering, fluid power, finite element analysis, natural resource conservation, and engineering properties of biological materials. Excellent career opportunities exist in product engineering, equipment research and design, facilities design, environmental consulting, and engineering management. Students in this program earn a Bachelor of Science in Agricultural Engineering, (BSAGE).

Degree Requirements

128 Credits Required

Departmental/Program Major Courses (125-126 credits)

Required Major Courses (34 credits)

- ABE 20500 - Computations For Engineering Systems
- ABE 21000 - Thermodynamics Principles Of Engineering And Biological Systems
- ABE 29000 - Sophomore Seminar (satisfies Science, Technology, and Society for core)
- ABE 30500 - Physical Properties Of Biological Materials
- ABE 31400 - Design Of Electronic Systems
- ABE 32000 - Solid Modeling, Simulation, And Analysis
- ABE 32500 - Soil And Water Resource Engineering
- ABE 33000 - Design Of Machine Components
- ABE 43500 - Hydraulic Control Systems For Mobile Equipment
- ABE 45000 - Finite Element Method In Design And Optimization
- ABE 48400 - Project Planning And Management
- ABE 48600 - Agricultural Engineering Design
- ABE 49000 - Professional Practice In Agricultural And Biological Engineering

Other Departmental /Program Course Requirements (91-92 credits)

- AGRY 25500 - Soil Science
- ENGR 13100 - Transforming Ideas To Innovation I (satisfies Information Literacy for core)
- ENGR 13200 - Transforming Ideas To Innovation II
- CHM 11500 - General Chemistry (satisfies Science #1 for core)
- MA 16500 - Analytic Geometry And Calculus I (satisfies Quantitative Reasoning for core)
- MA 16600 - Analytic Geometry And Calculus II
- ME 27000 - Basic Mechanics I
- ME 27400 - Basic Mechanics II ♦
- NUCL 27300 - Mechanics Of Materials
- PHYS 17200 - Modern Mechanics (satisfies Science #2 for the core)
- PHYS 24100 - Electricity And Optics
- CE 34000 - Hydraulics
- CE 34300 - Elementary Hydraulics Laboratory

- CHM 11600 - General Chemistry or
- CS 15900 - Programming Applications For Engineers

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills (satisfies Oral Communication for core)

- Agricultural Selective - Credit Hours: 3.00
- Biological Science Selective - Credit Hours: 4.00
- Biological Science Selective - Credit Hours: 4.00
- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Engineering Technical Selective - Credits: 3.00
- Engineering Technical Selective - Credits: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Written and Oral Communication Selective - Credit Hours: 3.00

**Electives (2-3 credits)**

**College of Agriculture & University Level Requirements**

- 2.0 GPA required for Bachelor of Science degree.
- 32 Upper division credits taken from Purdue
- 6 credits International Understanding
- 3 credits Multicultural Awareness
- 6 credits - 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ courses or above, and an additional 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ or above or from a course with a required pre-requisite in the same department.
- 9 credits of Humanities and/or Social Sciences outside the College of Agriculture

**University Core Requirements**

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

  For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Agricultural Engineering Supplemental Information

Program Requirements

Fall 1st Year

• ENGR 13100 - Transforming Ideas To Innovation I
• UCC Humanities Selective - Credit Hours: 3.00
• MA 16500 - Analytic Geometry And Calculus I
• CHM 11500 - General Chemistry
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

16-17 Credits

Spring 1st Year

• ENGR 13200 - Transforming Ideas To Innovation II
• MA 16600 - Analytic Geometry And Calculus II
• PHYS 17200 - Modern Mechanics
• CHM 11600 - General Chemistry or
• CS 15900 - Programming Applications For Engineers
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16-17 Credits
Fall 2nd Year

- ABE 20500 - Computations For Engineering Systems
- ABE 29000 - Sophomore Seminar
- MA 26100 - Multivariate Calculus
- ME 27000 - Basic Mechanics I
- PHYS 24100 - Electricity And Optics
- Economics Selective - Credit Hours: 3.00

17 Credits

Spring 2nd Year

- ABE 21000 - Thermodynamics Principles Of Engineering And Biological Systems
- MA 26200 - Linear Algebra And Differential Equations
- ME 27400 - Basic Mechanics II ♦
- NUCL 27300 - Mechanics Of Materials
- Biological Science Selective - Credit Hours: 4.00

17 Credits

Fall 3rd Year

- ABE 30500 - Physical Properties Of Biological Materials
- ABE 32500 - Soil And Water Resource Engineering
- AGRY 25500 - Soil Science
- CE 34000 - Hydraulics and
- CE 34300 - Elementary Hydraulics Laboratory
- Agricultural Selective - Credit Hours: 3.00

17 Credits

Spring 3rd Year

- ABE 31400 - Design Of Electronic Systems
- ABE 32000 - Solid Modeling, Simulation, And Analysis
- ABE 33000 - Design Of Machine Components
- Biological Science Selective - Credit Hours: 4.00
- Humanities or Social Science Selective - Credit Hours: 3.00

16 Credits

Fall 4th Year
- ABE 43500 - Hydraulic Control Systems For Mobile Equipment
- ABE 45000 - Finite Element Method In Design And Optimization
- ABE 48400 - Project Planning And Management
- ABE 49000 - Professional Practice In Agricultural And Biological Engineering
- Engineering Technical Selective - Credit Hours: 3.00
- Written and Oral Communication Selective - Credit Hours: 3.00

14 Credits

Spring 4th Year

- ABE 48600 - Agricultural Engineering Design
- Engineering Technical Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 2.00 or 3.00 *Depending on choice of CHM 11600 or CS 15900

14-15 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.
- Official and complete prerequisite lists are in the course catalog.

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Agricultural Systems Management, BS

About the Program

Agricultural Systems Management (ASM) prepares individuals to organize and manage environmentally sound, technology-based businesses. The program's emphasis is on planning and directing an industry or business project with responsibility for results. ASM is based on an understanding of how equipment and buildings are used with plants and animals and their products. These processes require an understanding of the biological sciences to produce and maintain top product quality.
Computer skills are taught and used throughout the curriculum. Computers are used to collect and analyze data, and then using that information, to control machines and processes. Other uses involve planning layouts of equipment and buildings, creating graphics for reports, etc. Agricultural Systems Management students also take several of courses in communications, business management and agricultural sciences, in addition to their specialty courses based in the Agricultural and Biological Engineering Department. The program provides an in-depth technical knowledge for selecting and applying advanced technologies in the food, feed, fiber, and fuel system. Graduates are prepared to solve a wide variety of business and technical problems in a job field that continues to grow.

Agricultural Systems Management students also take several of courses in communications, business management and agricultural sciences, in addition to their specialty courses based in the Agricultural and Biological Engineering Department. The program provides an in-depth technical knowledge for selecting and applying advanced technologies in the food, feed, fiber, and fuel system. Graduates are prepared to solve a wide variety of business and technical problems in a job field that continues to grow.

In addition to the established Agricultural Systems Management program, students can choose to specialize in one of the following concentrations.

- Data & Information Systems
- Leadership & Management
- Agro-Security

Some of the factors that contribute to Agricultural & Biological Engineering at Purdue University being a top ranked program:

- Multiple opportunities for interaction with faculty in laboratories and in classes
- Student Competitions, Clubs, Global Experiences
- Personalized advising and attention from faculty
- Practical curriculum for industrial careers
- Great opportunities for scholarships and internships
- Excellent placement record and starting salaries

Watch a video and take a look at some senior projects. We hope to see you in ABE soon!

### Degree Requirements

#### 120 Credits Required

**Departmental/Program Major Courses (116-119 credits)**

**Required Major Courses (28 credits)**

- ASM 10400 - Introduction To Agricultural Systems
- ASM 10500 - Agricultural Systems Computations And Communication
- ASM 21100 - Technical Graphic Communications
- ASM 22100 - Career Opportunities Seminar
- ASM 22200 - Crop Production Equipment ♦
- ASM 33300 - Facilities Planning And Management
- ASM 34500 - Power Units And Power Trains
- ASM 35000 - Safety In Agriculture
- ASM 42000 - Electric Power And Controls
- ASM 42100 - Senior Seminar
- ASM 49400 - Project Planning And Management
ASM 49500 - Agricultural Systems Management Capstone Project

Major Selectives (6 credits)

- ASM 23600 - Environmental Systems Management
- ASM 24500 - Materials Handling And Processing
- ASM 40000+ Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (82-85 credits)

- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11100 - Introduction To Agricultural And Biological Engineering Academic Programs
- AGRY 25500 - Soil Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- PHYS 21400 - The Nature Of Physics
- STAT 30100 - Elementary Statistical Methods

- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 32100 - Principles Of Commodity Marketing
- AGEC 32700 - Principles Of Food And Agribusiness Marketing

- AGEC 31000 - Farm Organization
- AGEC 33000 - Management Methods For Agricultural Business

- MGMT 20000 - Introductory Accounting
- MGMT 20010 - Business Accounting

- AGEC 45500 - Agricultural Law
- MGMT 45500 - Legal Background For Business I

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core)
- ENGL 10800 - Accelerated First-Year Composition
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
- COM 21700 - Science Writing And Presentation
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Agricultural Selective - Credit Hours: 3.00
- Agricultural Selective - Credit Hours: 3.00
- Agricultural Selective - Credit Hours: 3.00
- Agricultural Selective - Credit Hours: 3.00
• Biological Science Selective - Credit Hours: 4.00
• Biological Science Selective - Credit Hours: 4.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Human Cultures Humanities Selective - Credit Hours: 3.00
• Science, Technology & Society Selective - Credit Hours: 1.00-3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (1-4 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Agricultural Systems Management Supplemental Information

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Program Requirements
Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11100 - Introduction To Agricultural And Biological Engineering Academic Programs
- ASM 10400 - Introduction To Agricultural Systems
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Human Cultures Humanities Selective - Credit Hours: 3.00

16 Credits

Spring 1st Year

- ASM 10500 - Agricultural Systems Computations And Communication
- CHM 11200 - General Chemistry
- PHYS 21400 - The Nature Of Physics
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Economics Selective - Credit Hours: 3.00

15-16 Credits

Fall 2nd Year

- ASM 21100 - Technical Graphic Communications
- ASM 22100 - Career Opportunities Seminar
- ASM 22200 - Crop Production Equipment
- STAT 30100 - Elementary Statistical Methods
- Biological Science Selective - Credit Hours: 4.00

14 Credits

Spring 2nd Year

- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGRY 25500 - Soil Science
- ASM 23600 - Environmental Systems Management or
• ASM 24500 - Materials Handling And Processing
• MGMT 20000 - Introductory Accounting or
  MGMT 20010 - Business Accounting
• Biological Science Selective - Credit Hours: 4.00

16 Credits

Fall 3rd Year

• AGEC 33100 - Principles Of Selling In Agricultural Business
• ASM 34500 - Power Units And Power Trains
• AGEC 22000 - Economics Of Agricultural Markets or
  AGEC 32100 - Principles Of Commodity Marketing or
  AGEC 32700 - Principles Of Food And Agribusiness Marketing
• Science, Technology, & Society Selective - Credit Hours: 1.00-3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

13-15 Credits

Spring 3rd Year

• ASM 33300 - Facilities Planning And Management
• ASM 35000 - Safety In Agriculture
• ASM 42000 - Electric Power And Controls
• AGEC 31000 - Farm Organization or
  AGEC 33000 - Management Methods For Agricultural Business
• Agricultural Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00

16 Credits

Fall 4th Year

• ASM 42100 - Senior Seminar
• ASM 49400 - Project Planning And Management
• AGEC 45500 - Agricultural Law or
  MGMT 45500 - Legal Background For Business I
• Agricultural Selective - Credit Hours: 3.00
• Agricultural Selective - Credit Hours: 3.00
14 Credits

Spring 4th Year

- ASM 49500 - Agricultural Systems Management Capstone Project
- ASM 40000+ Selective - Credit Hours: 3.00
- Agricultural Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 1.00-4.00

13-16 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.
- Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

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Agricultural Systems Management: AgroSecurity Concentration, BS

About the Program
Agricultural Systems Management (ASM) prepares individuals to organize and manage environmentally sound, technology-based businesses. The program's emphasis is on planning and directing an industry or business project with responsibility for results. ASM is based on an understanding of how equipment and buildings are used with plants and animals and their products. These processes require an understanding of the biological sciences to produce and maintain top product quality.

Computer skills are taught and used throughout the curriculum. Computers are used to collect and analyze data, and then using that information, to control machines and processes. Other uses involve planning layouts of equipment and buildings, creating graphics for reports, etc. Agricultural Systems Management students also take several of courses in communications, business management and agricultural sciences, in addition to their specialty courses based in the Agricultural and Biological Engineering Department. The program provides an in-depth technical knowledge for selecting and applying advanced technologies in the food, feed, fiber, and fuel system. Graduates are prepared to solve a wide variety of business and technical problems in a job field that continues to grow.

Agricultural Systems Management students also take several of courses in communications, business management and agricultural sciences, in addition to their specialty courses based in the Agricultural and Biological Engineering Department. The program provides an in-depth technical knowledge for selecting and applying advanced technologies in the food, feed, fiber, and fuel system. Graduates are prepared to solve a wide variety of business and technical problems in a job field that continues to grow.

Agriculture is vulnerable to a wide range of threats with the potential of disrupting both local and national food security. The Agro-security concentration enables students to acquire a higher level of specialization in the principles and practices needed to pursue employment in areas related to the prevention, preparedness, mitigation, response, and recovery related to threats to agricultural resources from field to table. Completion of this concentration will open up opportunities in positions that address loss prevention, risk management, regulatory compliance, and emergency management. Students will still also get the Food and Agribusiness Management Minor.

Some of the factors that contribute to Agricultural & Biological Engineering at Purdue University being a top ranked program:

- Multiple opportunities for interaction with faculty in laboratories and in classes
- Student Competitions, Clubs, Global Experiences
- Personalized advising and attention from faculty
- Practical curriculum for industrial careers
- Great opportunities for scholarships and internships
- Excellent placement record and starting salaries

Watch a video and take a look at some senior projects. We hope to see you in ABE soon!

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (37 credits)

Required Major Courses (31 credits)

- ASM 10400 - Introduction To Agricultural Systems
- ASM 10500 - Agricultural Systems Computations And Communication
- ASM 21100 - Technical Graphic Communications
- ASM 22100 - Career Opportunities Seminar
- ASM 22200 - Crop Production Equipment
- ASM 24500 - Materials Handling And Processing
- ASM 33300 - Facilities Planning And Management
- ASM 35000 - Safety In Agriculture
- ASM 42000 - Electric Power And Controls
- ASM 42100 - Senior Seminar
- ASM 49400 - Project Planning And Management
- ASM 49500 - Agricultural Systems Management Capstone Project
- ASM 51000 - Agrosecurity-Emergency Management For Agricultural Production Operations

Major Selectives (6 credits)
- ASM 23600 - Environmental Systems Management or
- ASM 34500 - Power Units And Power Trains
- ASM 40000+ Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (79-82 credits)
- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11100 - Introduction To Agricultural And Biological Engineering Academic Programs
- AGRY 25500 - Soil Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- CNIT 51100 - Foundations In Homeland Security Studies
- CNIT 51200 - Managing Resources And Applications For Homeland Security
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- PHYS 21400 - The Nature Of Physics
- STAT 30100 - Elementary Statistical Methods
- AGEC 45500 - Agricultural Law or
- MGMT 45500 - Legal Background For Business I
- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing (satisfies Oral Communication for core)
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Biological Science Selective - Credit Hours: 4.00
• Biological Science Selective - Credit Hours: 4.00
• Agrosecurity Selective - Credit Hours: 3.00
• Marketing Selective - Credit Hours: 3.00
• Written or Oral Communication Selective - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00 (satisfies Human Culture Behavioral/Social Science for core)
• Human Culture Humanities Selective - Credit Hours: 3.00
• Human Culture Humanities or Behavioral/Social Science - Credit Hours: 3.00
• Human Culture Humanities or Behavioral/Social Science - Credit Hours: 3.00
• Human Culture Humanities or Behavioral/Social Science (30000+ level) - Credit Hours: 3.00
• Science, Technology & Society Selective - Credit Hours: 1.00-3.00

Electives (1-4 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Agricultural Systems Management Supplemental Information

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.
Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11100 - Introduction To Agricultural And Biological Engineering Academic Programs
- ASM 10400 - Introduction To Agricultural Systems
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Economics Selective - Credit Hours: 3.00

16 Credits

Spring 1st Year

- ASM 10500 - Agricultural Systems Computations And Communication
- CHM 11200 - General Chemistry
- PHYS 21400 - The Nature Of Physics

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- Human Cultures Humanities - Credit Hours: 3.00

15-16 Credits

Fall 2nd Year

- ASM 21100 - Technical Graphic Communications
- ASM 22100 - Career Opportunities Seminar
- ASM 22200 - Crop Production Equipment ♦
- STAT 30100 - Elementary Statistical Methods
- Biological Science Selective - Credit Hours: 4.00

14 Credits

Spring 2nd Year

- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGRY 25500 - Soil Science
• ASM 24500 - Materials Handling And Processing

• MGMT 20000 - Introductory Accounting or
  MGMT 20010 - Business Accounting

• Biological Science Selective - Credit Hours: 4.00

16 Credits

Fall 3rd Year

• ASM 23600 - Environmental Systems Management or
  ASM 34500 - Power Units And Power Trains

• AGEC 33100 - Principles Of Selling In Agricultural Business
• ASM 42000 - Electric Power And Controls
• Science, Technology & Society Selective - Credit Hours: 1.00-3.00
• Written or Oral Communication Selective - Credit Hours: 3.00

13-15 Credits

Spring 3rd Year

• AGEC 33000 - Management Methods For Agricultural Business
• ASM 33300 - Facilities Planning And Management
• ASM 35000 - Safety In Agriculture
• Agrosecurity Selective - Credit Hours: 3.00
• Human Culture Humanities or Behavioral/Social Science - Credit Hours: 3.00
• Human Culture Humanities or Behavioral/Social Science - Credit Hours: 3.00

16 Credits

Fall 4th Year

• ASM 42100 - Senior Seminar
• ASM 49400 - Project Planning And Management
• ASM 51000 - Agrosecurity-Emergency Management For Agricultural Production Operations
• CNIT 51100 - Foundations In Homeland Security Studies

• AGEC 45500 - Agricultural Law or
• MGMT 45500 - Legal Background For Business I

• Marketing Selective - Credit Hours: 3.00

14 Credits
Spring 4th Year

- ASM 49500 - Agricultural Systems Management Capstone Project
- CNIT 51200 - Managing Resources And Applications For Homeland Security
- ASM 40000+ Selective - Credit Hours: 3.00
- Human Culture Humanities or Behavioral/Social Science (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 1.00-4.00

13-16 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Agricultural Systems Management: Data and Information Systems, BS

Agricultural Systems Management (ASM) prepares individuals to organize and manage environmentally sound, technology-based businesses. The program's emphasis is on planning and directing an industry or business project with responsibility for results. ASM is based on an understanding of how equipment and buildings are used with plants and animals and their products. These processes require an understanding of the biological sciences to produce and maintain top product quality.

Computer skills are taught and used throughout the curriculum. Computers are used to collect and analyze data, and then using that information, to control machines and processes. Other uses involve planning layouts of equipment and buildings, creating graphics for reports, etc. Agricultural Systems Management students also take several of courses in communications, business management and agricultural sciences, in addition to their specialty courses based in the Agricultural and Biological Engineering Department. The program provides an in-depth technical knowledge for selecting and applying advanced technologies in the
food, feed, fiber, and fuel system. Graduates are prepared to solve a wide variety of business and technical problems in a job field that continues to grow.

Agricultural Systems Management students also take several of courses in communications, business management and agricultural sciences, in addition to their specialty courses based in the Agricultural and Biological Engineering Department. The program provides an in-depth technical knowledge for selecting and applying advanced technologies in the food, feed, fiber, and fuel system. Graduates are prepared to solve a wide variety of business and technical problems in a job field that continues to grow.

The Data and Information Systems concentration supports the growing data and information need in agriculture and is structured so that students can readily obtain the Computer and Information Systems minor. Industry is seeking graduates who understand cropping and animal agriculture; they also wish they had stronger information technology skills such as programming, app development, and data handling. This concentration addresses this need and complements the facility and equipment technology focus of the ASM major. Students will still also get the Food and Agribusiness Management Minor.

Some of the factors that contribute to Agricultural & Biological Engineering at Purdue University being a top ranked program:

- Multiple opportunities for interaction with faculty in laboratories and in classes
- Student Competitions, Clubs, Global Experiences
- Personalized advising and attention from faculty
- Practical curriculum for industrial careers
- Great opportunities for scholarships and internships
- Excellent placement record and starting salaries

Watch a video and take a look at some senior projects. We hope to see you in ABE soon!

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (34 credits)

Required Major Courses (25 credits)

- ASM 10400 - Introduction To Agricultural Systems
- ASM 10500 - Agricultural Systems Computations And Communication
- ASM 21100 - Technical Graphic Communications
- ASM 22100 - Career Opportunities Seminar
- ASM 22200 - Crop Production Equipment
- ASM 33300 - Facilities Planning And Management
- ASM 35000 - Safety In Agriculture
- ASM 42100 - Senior Seminar
- ASM 49400 - Project Planning And Management
- ASM 49500 - Agricultural Systems Management Capstone Project
- ASM 54000 - Geographic Information System Application

Major Selectives (9 credits)

- ASM Selective - Credit Hours: 9.00
Other Departmental /Program Course Requirements (82-85 credits)

- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11100 - Introduction To Agricultural And Biological Engineering Academic Programs
- AGRY 25500 - Soil Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- CNIT 15501 - Introduction To Software Development Concepts
- CNIT 18000 - Introduction To Systems Development
- CNIT 25501 - Object-Oriented Programming Introduction
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core) (satisfies Oral Communication for core)
- MGMT 20000 - Introductory Accounting
- MGMT 20010 - Business Accounting
- PHYS 21400 - The Nature Of Physics
- STAT 30100 - Elementary Statistical Methods
- AGEC 45500 - Agricultural Law or
- MGMT 45500 - Legal Background For Business I

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Biological Science Selective - Credit Hours: 4.00
- Biological Science Selective - Credit Hours: 4.00
- CNIT Selective - Credit Hours: 3.00
- Marketing Selective - Credit Hours: 3.00
- Written or Oral Communication Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00 (satisfies Human Culture Behavioral/Social Science for core)
- Human Culture Humanities Selective - Credit Hours: 3.00
- Human Culture Humanities or Behavioral/Social Science - Credit Hours: 3.00
- Human Culture Humanities or Behavioral/Social Science - Credit Hours: 3.00
- Human Culture Humanities or Behavioral/Social Science (30000+ level) - Credit Hours: 3.00
- Science, Technology & Society Selective - Credit Hours: 1.00-3.00

Electives (1-4 credits)

College of Agriculture & University Level Requirements
- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Agricultural Systems Management Supplemental Information

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11100 - Introduction To Agricultural And Biological Engineering Academic Programs
- ASM 10400 - Introduction To Agricultural Systems
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Economics Selective - Credit Hours: 3.00

16 Credits
Spring 1st Year

- ASM 10500 - Agricultural Systems Computations And Communication
- CHM 11200 - General Chemistry
- PHYS 21400 - The Nature Of Physics
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Human Culture Humanities Selective - Credit Hours: 3.00

15-16 Credits

Fall 2nd Year

- ASM 21100 - Technical Graphic Communications
- ASM 22100 - Career Opportunities Seminar
- ASM 22200 - Crop Production Equipment ♦
- CNIT 18000 - Introduction To Systems Development
- Biological Science Selective - Credit Hours: 4.00

14 Credits

Spring 2nd Year

- AGRY 25500 - Soil Science
- CNIT 15501 - Introduction To Software Development Concepts
- STAT 30100 - Elementary Statistical Methods
- Biological Science Selective - Credit Hours: 4.00
- ASM Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting
- ASM Selective - Credit Hours: 3.00
- Marketing Selective - Credit Hours: 3.00

15 Credits
Spring 3rd Year

- AGEC 33000 - Management Methods For Agricultural Business
- ASM 33300 - Facilities Planning And Management
- ASM 35000 - Safety In Agriculture
- CNIT 25501 - Object-Oriented Programming Introduction
- Written or Oral Communication Selective - Credit Hours: 3.00
- Human Culture Humanities or Behavioral/Social Science - Credit Hours: 3.00

16 Credits

Fall 4th Year

- ASM 42100 - Senior Seminar
- ASM 49400 - Project Planning And Management
- ASM 54000 - Geographic Information System Application
- AGEC 45500 - Agricultural Law or
- MGMT 45500 - Legal Background For Business I
- CNIT Selective - Credit Hours: 3.00
- Human Culture Humanities or Behavioral/Social Science - Credit Hours: 3.00

14 Credits

Spring 4th Year

- ASM 49500 - Agricultural Systems Management Capstone Project
- ASM Selective - Credit Hours: 3.00
- Science, Technology & Society Selective - Credit Hours: 1.00-3.00
- Human Culture Humanities or Behavioral/Social Science (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 1.00-4.00

11-16 Credits

Notes

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course
The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Agricultural Systems Management: Leadership and Management, BS

About the Program

Agricultural Systems Management (ASM) prepares individuals to organize and manage environmentally sound, technology-based businesses. The program's emphasis is on planning and directing an industry or business project with responsibility for results. ASM is based on an understanding of how equipment and buildings are used with plants and animals and their products. These processes require an understanding of the biological sciences to produce and maintain top product quality.

Computer skills are taught and used throughout the curriculum. Computers are used to collect and analyze data, and then using that information, to control machines and processes. Other uses involve planning layouts of equipment and buildings, creating graphics for reports, etc. Agricultural Systems Management students also take several of courses in communications, business management and agricultural sciences, in addition to their specialty courses based in the Agricultural and Biological Engineering Department. The program provides an in-depth technical knowledge for selecting and applying advanced technologies in the food, feed, fiber, and fuel system. Graduates are prepared to solve a wide variety of business and technical problems in a job field that continues to grow.

Agricultural Systems Management students also take several of courses in communications, business management and agricultural sciences, in addition to their specialty courses based in the Agricultural and Biological Engineering Department. The program provides an in-depth technical knowledge for selecting and applying advanced technologies in the food, feed, fiber, and fuel system. Graduates are prepared to solve a wide variety of business and technical problems in a job field that continues to grow.

The Leadership & Management concentration more adequately prepares graduates for supervision and leadership in the technology arena of agribusiness. The 4 Organizational Leadership and Supervision (or Technology Leadership and Innovation) courses lead to the Organizational and Leadership Supervision minor for added credentials in this area. Students will still also get the Food and Agribusiness Management Minor.

Some of the factors that contribute to Agricultural & Biological Engineering at Purdue University being a top ranked program:

- Multiple opportunities for interaction with faculty in laboratories and in classes
- Student Competitions, Clubs, Global Experiences
- Personalized advising and attention from faculty
- Practical curriculum for industrial careers
- Great opportunities for scholarships and internships
- Excellent placement record and starting salaries

Watch a video and take a look at some senior projects. We hope to see you in ABE soon!
Degree Requirements

120 Credits Required

Departmental/Program Major Courses (34 credits)

Required Major Courses (22 credits)

- ASM 10400 - Introduction To Agricultural Systems
- ASM 10500 - Agricultural Systems Computations And Communication
- ASM 21100 - Technical Graphic Communications
- ASM 22100 - Career Opportunities Seminar
- ASM 22200 - Crop Production Equipment
- ASM 33300 - Facilities Planning And Management
- ASM 35000 - Safety In Agriculture
- ASM 42100 - Senior Seminar
- ASM 49400 - Project Planning And Management
- ASM 49500 - Agricultural Systems Management Capstone Project

Major Selectives (12 credits)

- ASM Selective - Credit Hours: 9.00
- ASM Selective (40000+ level) - Credit Hours: 3.00

Other Departmental /Program Course Requirements (82-85 credits)

- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11100 - Introduction To Agricultural And Biological Engineering Academic Programs
- AGRY 25500 - Soil Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- OLS 25200 - Human Relations In Organizations
- OLS 27400 - Applied Leadership
- OLS 28400 - Leadership Principles
- OLS 38600 - Leadership For Organizational Change And Innovation
- PHYS 21400 - The Nature Of Physics
- STAT 30100 - Elementary Statistical Methods

- AGEC 45500 - Agricultural Law or
- MGMT 45500 - Legal Background For Business I
- MGMT 20000 - Introductory Accounting or
  MGMT 20010 - Business Accounting

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
  ENGL 10800 - Accelerated First-Year Composition or
  HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
  COM 21700 - Science Writing And Presentation or
  EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Biological Science Selective - Credit Hours: 4.00
- Marketing Selective - Credit Hours: 3.00
- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Human Cultures Humanities Selective - Credit Hours: 3.00
- Science, Technology & Society Selective - Credit Hours: 1.00 - 3.00
- Human Culture Humanities or Behavioral/Social Science Selective - Credit Hours: 3.00
- Human Culture Humanities or Behavioral/Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communication Selective - Credit Hours: 3.00

Electives (1-4 credits)

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Agricultural Systems Management Supplemental Information

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11100 - Introduction To Agricultural And Biological Engineering Academic Programs
- ASM 10400 - Introduction To Agricultural Systems
- CHM 11100 - General Chemistry
- Economics Selective - Credit Hours: 3.00
- MA 16010 - Applied Calculus I
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Spring 1st Year

- ASM 10500 - Agricultural Systems Computations And Communication
- Human Cultures Humanities Selective - Credit Hours: 3.00
- CHM 11200 - General Chemistry
- PHYS 21400 - The Nature Of Physics
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

15-16 Credits

Fall 2nd Year

- ASM 21100 - Technical Graphic Communications
- ASM 22100 - Career Opportunities Seminar
- ASM 22200 - Crop Production Equipment
- STAT 30100 - Elementary Statistical Methods
• Biological Science Selective - Credit Hours: 4.00

14 Credits

Spring 2nd Year

• AGEC 35200 - Quantitative Techniques For Firm Decision Making
• AGRY 25500 - Soil Science
• Biological Science Selective - Credit Hours: 4.00
• ASM Selective - Credit Hours: 3.00

• MGMT 20000 - Introductory Accounting or
• MGMT 20010 - Business Accounting

16 Credits

Fall 3rd Year

• AGEC 33100 - Principles Of Selling In Agricultural Business
• ASM Selective - Credit Hours: 3.00
• Written or Oral Communication Selective - Credit Hours: 3.00
• Marketing Selective - Credit Hours: 3.00
• Science, Technology & Society Selective - Credit Hours: 3.00

13-15 Credits

Spring 3rd Year

• AGEC 33000 - Management Methods For Agricultural Business
• ASM 33300 - Facilities Planning And Management
• ASM 35000 - Safety In Agriculture
• OLS 25200 - Human Relations In Organizations
• Human Culture Humanities or Behavioral/Social Science Selectives - Credit Hours: 3.00
• Human Culture Humanities or Behavioral/Social Science Selectives - Credit Hours: 3.00

16 Credits

Fall 4th Year

• ASM 42100 - Senior Seminar
• ASM 49400 - Project Planning And Management
• ASM Selective - Credit Hours: 3.00
• OLS 27400 - Applied Leadership
• OLS 28400 - Leadership Principles

• AGEC 45500 - Agricultural Law or
• MGMT 45500 - Legal Background For Business I

14 Credits

Spring 4th Year

• ASM 49500 - Agricultural Systems Management Capstone Project
• OLS 38600 - Leadership For Organizational Change And Innovation
• ASM Selective (40000+ level) - Credit Hours: 3.00
• Human Culture Humanities or Behavioral/Social Science Selective (30000+ level) - Credit Hours: 3.00
• Elective - Credit Hours: 1.00-4.00

13-16 Credits

Notes

• 2.0 GPA required for Bachelor of Science degree.
• Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Biological Engineering, BSBE

About the Program

The Biological Engineering program is accredited by the Engineering Accreditation Commission of ABET.

Biological Engineering - multiple concentrations
The world has tremendous need for solutions to problems related to the environment, energy, health, food, and sustainability. Biological systems are related to or at the heart of all of these issues. A biological engineer learns to design and analyze biological systems to develop innovative and practical solutions. Our B.S. graduates are well prepared for careers in the food industry, pharmaceutical industry, biotechnology, and bioprocessing as well as entrance into graduate or medical school. Students may select a major and plan of study within biological engineering that is tailored to their specific career goals. Students in this program earn a Bachelor of Science in Agricultural Engineering, (BSAGE). Some areas of focus include:

**Cellular and biomolecular engineering:** This emerging field is expected to rapidly advance and open opportunities in biomanufacturing, drug design, human therapeutics, tissue and organ regeneration, bioenergy and biofuel production, bioremediation, and biodefense.

**Food & Biological process engineering:** This is an interdisciplinary field that applies the basic sciences, mathematics, and engineering to convert agricultural commodities into edible foods and biological materials through various processing steps. Advances in genetic engineering lead to new types of crops and new processing methods to create value added products.

**Pharmaceutical process engineering:** This program of study is targeted to provide graduates with unique skills and job opportunities to take on roles within all phases of the pharmaceutical industry including research, product and process development, processing engineering, manufacturing, and marketing. Watch a video and take a look at some senior projects.

Some of the factors that contribute to Agricultural & Biological Engineering at Purdue University being a top ranked program:

- Multiple opportunities for interaction with faculty in laboratories and in classes
- Student Competitions, Clubs, Global Experiences
- Personalized advising and attention from faculty
- Practical curriculum for industrial careers
- Great opportunities for scholarships and internships
- Excellent placement record and starting salaries

We hope to see you in ABE soon!

**Degree Requirements**

**129 Credits Required**

**Required Major Courses (45 credits)**

- ABE 20100 - Thermodynamics In Biological Systems I
- ABE 20200 - Thermodynamics In Biological Systems II
- ABE 29000 - Sophomore Seminar (satisfies Science, Technology, and Society for core)
- ABE 30100 - Numerical And Computational Modeling In Biological Engineering
- ABE 30300 - Applications Of Physical Chemistry To Biological Processes
- ABE 30400 - Bioprocess Engineering Laboratory
- ABE 30700 - Momentum Transfer In Food And Biological Systems
- ABE 30800 - Heat And Mass Transfer In Food And Biological Systems
- ABE 37000 - Biological/Microbial Kinetics And Reaction Engineering
- ABE 45700 - Transport Operations In Food And Biological Engineering I
- ABE 46000 - Sensors And Process Control
- ABE 49000 - Professional Practice In Agricultural And Biological Engineering
- ABE 55700 - Transport Operations In Food And Biological Systems II
- ABE 55800 - Process Design For Food And Biological Systems
• ABE Engineering Selectives - Credit Hours: 6.00

Other Departmental/Program Course Requirements (83-84 credits)

• ENGR 13100 - Transforming Ideas To Innovation I (satisfies Information Literacy for core)
• ENGR 13200 - Transforming Ideas To Innovation II
• CHM 11500 - General Chemistry (satisfies Science #1 for core)
• CHM 11600 - General Chemistry (satisfies Science #2 for core)
• MA 16500 - Analytic Geometry And Calculus I (satisfies Quantitative Reasoning for core)
• MA 16600 - Analytic Geometry And Calculus II
• MA 26100 - Multivariate Calculus
• MA 26200 - Linear Algebra And Differential Equations ♦
• MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences
• PHYS 17200 - Modern Mechanics
• CS 15900 - Programming Applications For Engineers
• CHE 32000 - Statistical Modeling And Quality Enhancement

• CHM 25700 - Organic Chemistry or
• CHM 25500 - Organic Chemistry

AND

• CHM 25501 - Organic Chemistry Laboratory

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing (satisfies Written Communication for core)

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills (satisfies Oral Communication for core)

• Ag Core Biology Selectives - Credit Hours: 8.00
• Life Science Selective - Credit Hours: 3.00
• Life Science or Engineering Selective - Credit Hours: 3.00
• Written or Oral Communications Selective - Credit Hours: 3.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

Elective (0-1 credit)

College of Agriculture and University Level Requirements

• 2.0 GPA required for Bachelor of Science degree.
• 32 Upper division credits taken from Purdue
• 6 credits International Understanding
• 3 credits Multicultural Awareness
• 6 credits - 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ courses or above, and an additional 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ or above or from a course with a required pre-requisite in the same department.
• 9 credits of Humanities and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Biological Engineering Supplemental Information

Program Requirements

Fall 1st Year

• ENGR 13100 - Transforming Ideas To Innovation I
• MA 16500 - Analytic Geometry And Calculus I
• CHM 11500 - General Chemistry
• PHYS 17200 - Modern Mechanics

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

17-18 Credits
Spring 1st Year

- ENGR 13200 - Transforming Ideas To Innovation II
- MA 16600 - Analytic Geometry And Calculus II
- CHM 11600 - General Chemistry
- CS 15900 - Programming Applications For Engineers
- COM 11400 - Fundamentals Of Speech Communication or
  COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 2nd Year

- ABE 20100 - Thermodynamics In Biological Systems I
- ABE 29000 - Sophomore Seminar
- MA 26100 - Multivariate Calculus
- CHM 25700 - Organic Chemistry or
  CHM 25500 - Organic Chemistry
  AND
- CHM 25601 - Organic Chemistry Laboratory
- Ag Core Biology Selective - Credit Hours: 4.00

17 Credits

Spring 2nd Year

- ABE 20200 - Thermodynamics In Biological Systems II
- MA 26200 - Linear Algebra And Differential Equations
- CHE 32000 - Statistical Modeling And Quality Enhancement
- Life Science Selective - Credit Hours: 3.00
- UCC Humanities Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- ABE 30300 - Applications Of Physical Chemistry To Biological Processes
- ABE 30700 - Momentum Transfer In Food And Biological Systems
- ABE 37000 - Biological/Microbial Kinetics And Reaction Engineering
- MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences
- Ag Core Biology Selective - Credit Hours: 4.00
16 Credits

Spring 3rd Year

- ABE 30100 - Numerical And Computational Modeling In Biological Engineering
- ABE 30400 - Bioprocess Engineering Laboratory
- ABE 30800 - Heat And Mass Transfer In Food And Biological Systems
- ABE 45700 - Transport Operations In Food And Biological Engineering I
- ABE Engineering Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00

18 Credits

Fall 4th Year

- ABE 46000 - Sensors And Process Control
- ABE 49000 - Professional Practice In Agricultural And Biological Engineering
- ABE 55700 - Transport Operations In Food And Biological Systems II
- Written or Oral Communication Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00

13 Credits

Spring 4th Year

- ABE 55800 - Process Design For Food And Biological Systems
- ABE Engineering Selective - Credit Hours: 3.00
- Life Science or Engineering Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 0.00 - 1.00

15-16 Credits

Notes

Students must have a graduation index of 2.0

Consultation with an advisor may result in an altered plan customized for an individual student.

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.
Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Biological Engineering: BioEnvironmental Engineering
Concentration, BSBE

About the Program

The Biological Engineering program is accredited by the Engineering Accreditation Commission of ABET.

Bioprocessing manufacturers, including food and pharmaceutical industries are looking for innovative environmental controls, waste processing, and water treatment to meet corporate sustainability goals and to comply with increasingly strict governmental regulations. The engineering rules-of-thumb and design heuristics based on past practices that have been the standard in municipal wastewater treatment design are less applicable to treating the highly variable waste stream characteristics of specialized industries. In addition, there exists a high potential for identifying value added products from these water streams. Our core BE curriculum provides students with the necessary biology, microbiology, and process engineering skills to tackle these challenging environmental design issues, but needs specific topics in environmental and bioprocessing engineering to focus the skills and marketability of our graduates. This concentration builds upon two core strengths in ABE at Purdue: bioprocessing, and environmental and natural resource engineering, and this concentration will allow the faculty to build both programs by leveraging joint course offerings.

Degree Requirements

129 Credits Required

Required Major Courses (45 credits)

- ABE 20100 - Thermodynamics In Biological Systems I
- ABE 20200 - Thermodynamics In Biological Systems II
- ABE 29000 - Sophomore Seminar (satisfies Science, Technology, and Society for core)
- ABE 30100 - Numerical And Computational Modeling In Biological Engineering
- ABE 30300 - Applications Of Physical Chemistry To Biological Processes
- ABE 30400 - Bioprocess Engineering Laboratory
- ABE 30700 - Momentum Transfer In Food And Biological Systems
- ABE 30800 - Heat And Mass Transfer In Food And Biological Systems
- ABE 31400 - Design Of Electronic Systems
- ABE 32500 - Soil And Water Resource Engineering
- ABE 37000 - Biological/Microbial Kinetics And Reaction Engineering
- ABE 45700 - Transport Operations In Food And Biological Engineering I
- ABE 46000 - Sensors And Process Control
- ABE 49000 - Professional Practice In Agricultural And Biological Engineering
- ABE 55700 - Transport Operations In Food And Biological Systems II
• ABE 55800 - Process Design For Food And Biological Systems

Other Departmental/Program Course Requirements (83-84 credits)

• ENGR 13100 - Transforming Ideas To Innovation I (satisfies Information Literacy for core)
• ENGR 13200 - Transforming Ideas To Innovation II
• CHM 11500 - General Chemistry (satisfies Science #1 for core)
• CHM 11600 - General Chemistry (satisfies Science #2 for core)
• MA 16500 - Analytic Geometry And Calculus I (satisfies Quantitative Reasoning for core)
• MA 16600 - Analytic Geometry And Calculus II
• MA 26100 - Multivariate Calculus
• MA 26200 - Linear Algebra And Differential Equations ♦
• MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences
• PHYS 17200 - Modern Mechanics
• CS 15900 - Programming Applications For Engineers
• CHE 32000 - Statistical Modeling And Quality Enhancement
• AGRY 25500 - Soil Science

• CHM 25700 - Organic Chemistry or
• CHM 25500 - Organic Chemistry
  AND
• CHM 25501 - Organic Chemistry Laboratory

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills (satisfies Oral Communication for core)

• BioEnvironmental Selective - Credit Hours 3.00
• Ag Core Biology Selectives - Credit Hours: 8.00
• Written or Oral Communications Selective - Credit Hours: 3.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• Human Cultures Humanities Selective - Credit Hours: 3.00
• Human Cultures Humanities or Behavioral/Social Science Selective - Credit Hours: 3.00
• Human Cultures Humanities or Behavioral/Social Science Selective - Credit Hours: 3.00
• Human Cultures Humanities or Behavioral/Social Science Selective (30000+ level) - Credit Hours: 3.00

Elective (0-1 credit)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Biological Engineering: BioEnvironmental Supplemental Information.

Program Requirements

Fall 1st Year

- ENGR 13100 - Transforming Ideas To Innovation I
- MA 16500 - Analytic Geometry And Calculus I
- CHM 11500 - General Chemistry
- PHYS 17200 - Modern Mechanics
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

17-18 Credits

Spring 1st Year

- ENGR 13200 - Transforming Ideas To Innovation II
- MA 16600 - Analytic Geometry And Calculus II
- CHM 11600 - General Chemistry
- CS 15900 - Programming Applications For Engineers
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 2nd Year

- ABE 20100 - Thermodynamics In Biological Systems I
- ABE 29000 - Sophomore Seminar
- MA 26100 - Multivariate Calculus

- CHM 25700 - Organic Chemistry or
- CHM 25500 - Organic Chemistry AND
- CHM 25501 - Organic Chemistry Laboratory

- Ag Core Biology Selective - Credit Hours: 4.00

17 Credits

Spring 2nd Year

- ABE 20200 - Thermodynamics In Biological Systems II
- AGRY 25500 - Soil Science
- CHE 32000 - Statistical Modeling And Quality Enhancement
- MA 26200 - Linear Algebra And Differential Equations ♦
- Human Cultures Humanities Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- ABE 30300 - Applications Of Physical Chemistry To Biological Processes
- ABE 30700 - Momentum Transfer In Food And Biological Systems
- ABE 32500 - Soil And Water Resource Engineering
- ABE 37000 - Biological/Microbial Kinetics And Reaction Engineering
- MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences

16 Credits

Spring 3rd Year

- ABE 30100 - Numerical And Computational Modeling In Biological Engineering
• ABE 30400 - Bioprocess Engineering Laboratory
• ABE 30800 - Heat And Mass Transfer In Food And Biological Systems
• ABE 31400 - Design Of Electronic Systems
• ABE 45700 - Transport Operations In Food And Biological Engineering I
• Economics Selective - Credit Hours: 3.00

18 Credits

Fall 4th Year

• ABE 46000 - Sensors And Process Control
• ABE 49000 - Professional Practice In Agricultural And Biological Engineering
• ABE 55700 - Transport Operations In Food And Biological Systems II
• Written or Oral Communication Selective - Credit Hours: 3.00
• Human Cultures Humanities or Behavioral/Social Science Selective - Credit Hours: 3.00
• Ag Core Biology Selective - Credit Hours: 4.00

17 Credits

Spring 4th Year

• ABE 55800 - Process Design For Food And Biological Systems
• BioEnvironmental Selective - Credit Hours 3.00
• Human Cultures Humanities or Behavioral/Social Science Selective - Credit Hours: 3.00
• Human Cultures Humanities or Behavioral/Social Science Selective (30000+ level) - Credit Hours: 3.00

12 Credits

Notes

• Students must have a graduation index of 2.0
• Consultation with an advisor may result in an altered plan customized for an individual student.

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.
Biological Engineering: Cellular and Biomolecular Engineering Concentration, BSBE

About the Program

The Biological Engineering program is accredited by the Engineering Accreditation Commission of ABET.

Biological Engineering - multiple concentrations

The world has tremendous need for solutions to problems related to the environment, energy, health, food, and sustainability. Biological systems are related to or at the heart of all of these issues. A biological engineer learns to design and analyze biological systems to develop innovative and practical solutions. Our B.S. graduates are well prepared for careers in the food industry, pharmaceutical industry, biotechnology, and bioprocessing as well as entrance into graduate or medical school. Students may select a major and plan of study within biological engineering that is tailored to their specific career goals. Students in this program earn a Bachelor of Science in Biological Engineering (BSBE).

This emerging field is expected to rapidly advance and open opportunities in biomanufacturing, drug design, human therapeutics, tissue and organ regeneration, bioenergy and biofuel production, bioremediation, and biodefense.

Some of the factors that contribute to Agricultural & Biological Engineering at Purdue University being a top ranked program:

- Multiple opportunities for interaction with faculty in laboratories and in classes
- Student Competitions, Clubs, Global Experiences
- Personalized advising and attention from faculty
- Practical curriculum for industrial careers
- Great opportunities for scholarships and internships
- Excellent placement record and starting salaries

We hope to see you in ABE soon!

Degree Requirements

129 Credits Required

Required Major Courses (49 credits)

- ABE 20100 - Thermodynamics In Biological Systems I
- ABE 20200 - Thermodynamics In Biological Systems II
- ABE 22600 - Biotechnology Laboratory I
- ABE 22700 - Biotechnology Laboratory II
- ABE 29000 - Sophomore Seminar (satisfies Science, Technology, and Society for the core)
- ABE 30100 - Numerical And Computational Modeling In Biological Engineering
- ABE 30300 - Applications Of Physical Chemistry To Biological Processes
- ABE 30400 - Bioprocess Engineering Laboratory
• ABE 30700 - Momentum Transfer In Food And Biological Systems
• ABE 30800 - Heat And Mass Transfer In Food And Biological Systems
• ABE 37000 - Biological/Microbial Kinetics And Reaction Engineering
• ABE 44000 - Cell And Molecular Design Principles
• ABE 45700 - Transport Operations In Food And Biological Engineering I
• ABE 46000 - Sensors And Process Control
• ABE 49000 - Professional Practice In Agricultural And Biological Engineering
• ABE 55700 - Transport Operations In Food And Biological Systems II
• ABE 55800 - Process Design For Food And Biological Systems
• ABE 58000 - Process Engineering Of Renewable Resources

Other Departmental /Program Course Requirements (79-80 credits)

• BIOL 23000 - Biology Of The Living Cell
• CHE 32000 - Statistical Modeling And Quality Enhancement
• CHM 11500 - General Chemistry (satisfies Science #1 for core)
• CHM 11600 - General Chemistry (satisfies Science #2 for core)
• CS 15900 - Programming Applications For Engineers
• ENGR 13100 - Transforming Ideas To Innovation I
• ENGR 13200 - Transforming Ideas To Innovation II
• MA 16500 - Analytic Geometry And Calculus I (satisfies Quantitative Reasoning for core)
• MA 16600 - Analytic Geometry And Calculus II
• MA 26100 - Multivariate Calculus
• MA 26200 - Linear Algebra And Differential Equations ♦
• MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences
• PHYS 17200 - Modern Mechanics

• CHM 25700 - Organic Chemistry or
• CHM 25500 - Organic Chemistry
  AND
• CHM 25501 - Organic Chemistry Laboratory

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing (satisfies Written Communication for core)

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills (satisfies Oral Communication for core)

• Biological Science Selective - Credit Hours: 4.00
• Biological Science or Science Selective - Credit Hours: 3.00
• Written/Oral Communication Selective - Credit Hours: 3.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
Elective (1 credit)

College of Agriculture and University Level Requirements

- 2.0 GPA required for Bachelor of Science degree.
- 32 Upper division credits taken from Purdue
- 6 credits International Understanding
- 3 credits Multicultural Awareness
- 6 credits - 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ courses or above, and an additional 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ or above or from a course with a required pre-requisite in the same department.
- 9 credits of Humanities and/or Social Sciences outside the College of Agriculture

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Biological Engineering: Cellular and Biomolecular Supplemental Information

Program Requirements

Fall 1st Year

- ENGR 13100 - Transforming Ideas To Innovation I
- MA 16500 - Analytic Geometry And Calculus I
- PHYS 17200 - Modern Mechanics
- CHM 11500 - General Chemistry
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

17-18 Credits

Spring 1st Year

• ENGR 13200 - Transforming Ideas To Innovation II
• MA 16600 - Analytic Geometry And Calculus II
• CHM 11600 - General Chemistry
• CS 15900 - Programming Applications For Engineers
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 2nd Year

• ABE 20100 - Thermodynamics In Biological Systems I
• ABE 29000 - Sophomore Seminar
• ABE 22600 - Biotechnology Laboratory I
• MA 26100 - Multivariate Calculus
• BIOL 23000 - Biology Of The Living Cell
• CHM 25700 - Organic Chemistry or
• CHM 25500 - Organic Chemistry
  AND
• CHM 25501 - Organic Chemistry Laboratory

18 Credits

Spring 2nd Year

• ABE 20200 - Thermodynamics In Biological Systems II
• ABE 22700 - Biotechnology Laboratory II
• MA 26200 - Linear Algebra And Differential Equations ♦
• CHE 32000 - Statistical Modeling And Quality Enhancement
• Economics Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year
• ABE 30300 - Applications Of Physical Chemistry To Biological Processes
• ABE 30700 - Momentum Transfer In Food And Biological Systems
• ABE 37000 - Biological/Microbial Kinetics And Reaction Engineering
• MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences
• Biological Science Selective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

• ABE 30100 - Numerical And Computational Modeling In Biological Engineering
• ABE 30400 - Bioprocess Engineering Laboratory
• ABE 30800 - Heat And Mass Transfer In Food And Biological Systems
• ABE 45700 - Transport Operations In Food And Biological Engineering I
• Humanities or Social Science Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

• ABE 46000 - Sensors And Process Control
• ABE 49000 - Professional Practice In Agricultural And Biological Engineering
• ABE 55700 - Transport Operations In Food And Biological Systems II
• Biological Science or Science Selective - Credit Hours: 3.00
• Written or Oral Communication Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00

16 Credits

Spring 4th Year

• ABE 44000 - Cell And Molecular Design Principles
• ABE 55800 - Process Design For Food And Biological Systems
• ABE 58000 - Process Engineering Of Renewable Resources
• UCC Humanities Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Elective - Credit Hours: 0.00 - 1.00

15-16 Credits

Notes

• Students must have a graduation index of 2.0
• Consultation with an advisor may result in an altered plan customized for individual student.
Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Biological Engineering: Food and Biological Process Engineering Concentration, BSBE

About the Program

The Biological Engineering program is accredited by the Engineering Accreditation Commission of ABET.

Biological Engineering - multiple concentrations

The world has tremendous need for solutions to problems related to the environment, energy, health, food, and sustainability. Biological systems are related to or at the heart of all of these issues. A biological engineer learns to design and analyze biological systems to develop innovative and practical solutions. Our B.S. graduates are well prepared for careers in the food industry, pharmaceutical industry, biotechnology, and bioprocessing as well as entrance into graduate or medical school. Students may select a major and plan of study within biological engineering that is tailored to their specific career goals. Students in this program earn a Bachelor of Science in Biological Engineering, (BSBE ).

This interdisciplinary field applies the basic sciences, mathematics, and engineering to convert agricultural commodities into edible foods and biological materials through various processing steps. Advances in genetic engineering lead to new types of crops and new processing methods to create value added products.

Some of the factors that contribute to Agricultural & Biological Engineering at Purdue University being a top ranked program:

- Multiple opportunities for interaction with faculty in laboratories and in classes
- Student Competitions, Clubs, Global Experiences
- Personalized advising and attention from faculty
- Practical curriculum for industrial careers
- Great opportunities for scholarships and internships
- Excellent placement record and starting salaries

We hope to see you in ABE soon!

Degree Requirements

129 Credits Required
Required Major Courses (45 credits)

- ABE 20100 - Thermodynamics In Biological Systems I
- ABE 20200 - Thermodynamics In Biological Systems II
- ABE 29000 - Sophomore Seminar (satisfies Science, Technology, and Society for core)
- ABE 30100 - Numerical And Computational Modeling In Biological Engineering
- ABE 30300 - Applications Of Physical Chemistry To Biological Processes
- ABE 30400 - Bioprocess Engineering Laboratory
- ABE 30700 - Momentum Transfer In Food And Biological Systems
- ABE 30800 - Heat And Mass Transfer In Food And Biological Systems
- ABE 31400 - Design Of Electronic Systems
- ABE 37000 - Biological/Microbial Kinetics And Reaction Engineering
- ABE 45700 - Transport Operations In Food And Biological Engineering I
- ABE 46000 - Sensors And Process Control
- ABE 49000 - Professional Practice In Agricultural And Biological Engineering
- ABE 55700 - Transport Operations In Food And Biological Systems II
- ABE 55800 - Process Design For Food And Biological Systems
- ABE 58000 - Process Engineering Of Renewable Resources

Other Departmental/Program Course Requirements (83-84 credits)

- ENGR 13100 - Transforming Ideas To Innovation I (satisfies Information Literacy for core)
- ENGR 13200 - Transforming Ideas To Innovation II
- CHM 11500 - General Chemistry (satisfies Science #1 for core)
- CHM 11600 - General Chemistry (satisfies Science #2 for core)
- MA 16500 - Analytic Geometry And Calculus I (satisfies Quantitative Reasoning for core)
- MA 16600 - Analytic Geometry And Calculus II
- MA 26100 - Multivariate Calculus
- MA 26200 - Linear Algebra And Differential Equations
- MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences
- PHYS 17200 - Modern Mechanics
- CS 15900 - Programming Applications For Engineers
- CHE 32000 - Statistical Modeling And Quality Enhancement
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 22100 - Introduction To Microbiology

- CHM 25700 - Organic Chemistry or
- CHM 25500 - Organic Chemistry
  AND
- CHM 25501 - Organic Chemistry Laboratory

- NUTR 20500 - Food Science I or
- BCHM 30700 - Biochemistry

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing (satisfies Written Communication for core)
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills (satisfies Oral Communication for core)

• Written or Oral Communications Selective - Credit Hours: 3.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• Biological or Food Science Selective - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

Elective (0-1 credit)

College of Agriculture and University Level Requirements

• 2.0 GPA required for Bachelor of Science degree.
• 32 Upper division credits taken from Purdue
• 6 credits International Understanding
• 3 credits Multicultural Awareness
• 6 credits - 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ courses or above, and an additional 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ or above or from a course with a required pre-requisite in the same department.
• 9 credits of Humanities and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements
Program Requirements

Fall 1st Year

- ENGR 13100 - Transforming Ideas To Innovation I
- MA 16500 - Analytic Geometry And Calculus I
- CHM 11500 - General Chemistry
- PHYS 17200 - Modern Mechanics
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

17-18 Credits

Spring 1st Year

- CHM 11600 - General Chemistry
- CS 15900 - Programming Applications For Engineers
- ENGR 13200 - Transforming Ideas To Innovation II
- MA 16600 - Analytic Geometry And Calculus II
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 2nd Year

- ABE 20100 - Thermodynamics In Biological Systems I
- ABE 29000 - Sophomore Seminar
- BIOL 11000 - Fundamentals Of Biology I
- MA 26100 - Multivariate Calculus

- CHM 25700 - Organic Chemistry or
- CHM 25500 - Organic Chemistry
- CHM 25501 - Organic Chemistry Laboratory

17 Credits

Spring 2nd Year
• ABE 20200 - Thermodynamics In Biological Systems II
• CHE 32000 - Statistical Modeling And Quality Enhancement
• MA 26200 - Linear Algebra And Differential Equations
• UCC Humanities Selective - Credit Hours: 3.00

• NUTR 20500 - Food Science I or
• BCHM 30700 - Biochemistry

16 Credits

Fall 3rd Year

• ABE 30300 - Applications Of Physical Chemistry To Biological Processes
• ABE 30700 - Momentum Transfer In Food And Biological Systems
• ABE 37000 - Biological/Microbial Kinetics And Reaction Engineering
• BIOL 22100 - Introduction To Microbiology
• MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences

16 Credits

Spring 3rd Year

• ABE 30100 - Numerical And Computational Modeling In Biological Engineering
• ABE 30400 - Bioprocess Engineering Laboratory
• ABE 30800 - Heat And Mass Transfer In Food And Biological Systems
• ABE 31400 - Design Of Electronic Systems
• ABE 45700 - Transport Operations In Food And Biological Engineering I
• Economics Selective - Credit Hours: 3.00

18 Credits

Fall 4th Year

• ABE 46000 - Sensors And Process Control
• ABE 49000 - Professional Practice In Agricultural And Biological Engineering
• ABE 55700 - Transport Operations In Food And Biological Systems II
• Written or Oral Communication Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00

13 Credits

Spring 4th Year

• ABE 55800 - Process Design For Food And Biological Systems
• ABE 58000 - Process Engineering Of Renewable Resources
- Biological or Food Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 0.00 - 1.00

15-16 Credits

Notes

- Students must have a graduation index of 2.0
- Consultation with an advisor may result in an altered plan customized for an individual student.

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Biological Engineering: Pharmaceutical Process Engineering Concentration, BSBE

About the Program

The Biological Engineering program is accredited by the Engineering Accreditation Commission of ABET.

Biological Engineering - multiple concentrations

The world has tremendous need for solutions to problems related to the environment, energy, health, food, and sustainability. Biological systems are related to or at the heart of all of these issues. A biological engineer learns to design and analyze biological systems to develop innovative and practical solutions. Our B.S. graduates are well prepared for careers in the food industry, pharmaceutical industry, biotechnology, and bioprocessing as well as entrance into graduate or medical school. Students may select a major and plan of study within biological engineering that is tailored to their specific career goals. Students in this program earn a Bachelor of Science in Biological Engineering, (BSBE).

This program of study is targeted to provide graduates with unique skills and job opportunities to take on roles within all phases of the pharmaceutical industry including research, product and process development, processing engineering, manufacturing, and marketing. Watch a video and take a look at some senior projects.

Some of the factors that contribute to Agricultural & Biological Engineering at Purdue University being a top ranked program:

- Multiple opportunities for interaction with faculty in laboratories and in classes
• Student Competitions, Clubs, Global Experiences
• Personalized advising and attention from faculty
• Practical curriculum for industrial careers
• Great opportunities for scholarships and internships
• Excellent placement record and starting salaries

We hope to see you in ABE soon!

Degree Requirements

129 Credits Required

Required Major Courses (45 credits)

• ABE 20100 - Thermodynamics In Biological Systems I
• ABE 20200 - Thermodynamics In Biological Systems II
• ABE 29000 - Sophomore Seminar (satisfies Science, Technology, and Society for core)
• ABE 30100 - Numerical And Computational Modeling In Biological Engineering
• ABE 30300 - Applications Of Physical Chemistry To Biological Processes
• ABE 30400 - Bioprocess Engineering Laboratory
• ABE 30700 - Momentum Transfer In Food And Biological Systems
• ABE 30800 - Heat And Mass Transfer In Food And Biological Systems
• ABE 31400 - Design Of Electronic Systems
• ABE 37000 - Biological/Microbial Kinetics And Reaction Engineering
• ABE 45700 - Transport Operations In Food And Biological Engineering I
• ABE 46000 - Sensors And Process Control
• ABE 49000 - Professional Practice In Agricultural And Biological Engineering
• ABE 55700 - Transport Operations In Food And Biological Systems II
• ABE 55800 - Process Design For Food And Biological Systems
• ABE 58000 - Process Engineering Of Renewable Resources

Other Departmental /Program Course Requirements (84 credits)

• ENGR 13100 - Transforming Ideas To Innovation I (satisfies Information Literacy for core)
• ENGR 13200 - Transforming Ideas To Innovation II
• CHM 11500 - General Chemistry (satisfies Science #1 for core)
• CHM 11600 - General Chemistry (satisfies Science #2 for core)
• MA 16500 - Analytic Geometry And Calculus I (satisfies Quantitative Reasoning for core)
• MA 16600 - Analytic Geometry And Calculus II
• MA 26100 - Multivariate Calculus
• MA 26200 - Linear Algebra And Differential Equations ♦
• MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences
• PHYS 17200 - Modern Mechanics
• CS 15900 - Programming Applications For Engineers
- CHE 32000 - Statistical Modeling And Quality Enhancement
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 22100 - Introduction To Microbiology
- BCHM 30700 - Biochemistry
- IPPH 56200 - Introduction To Pharmaceutical Manufacturing Processes

- CHM 25700 - Organic Chemistry or
- CHM 25500 - Organic Chemistry
  AND
- CHM 25501 - Organic Chemistry Laboratory

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing (satisfies Written Communication for core)

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills (satisfies Oral Communication for core)

  Written or Oral Communications Selective - Credit Hours: 3.00
  Economics Selective - Credit Hours: 3.00 (satisfies Human Culture Behavioral/Social Science for core)
  UCC Humanities Selective - Credit Hours: 3.00 (satisfies Human Cultures Humanities for core)
  Humanities or Social Science Selective - Credit Hours: 3.00
  Humanities or Social Science Selective - Credit Hours: 3.00
  Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

**College of Agriculture and University Level Requirements**

- 2.0 GPA required for Bachelor of Science degree.
- 32 Upper division credits taken from Purdue
- 6 credits International Understanding
- 3 credits Multicultural Awareness
- 6 credits - 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ courses or above, and an additional 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ or above or from a course with a required pre-requisite in the same department.
- 9 credits of Humanities and/or Social Sciences outside the College of Agriculture

**University Core Requirements**

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
Quantitative Reasoning
For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:
For current pre-requisites for courses, click here.

Additional Degree Requirements
Click here for Biological Engineering: Pharmaceutical Process Engineering Supplemental Information

Program Requirements

Fall 1st Year

- ENGR 13100 - Transforming Ideas To Innovation I
- MA 16500 - Analytic Geometry And Calculus I
- CHM 11500 - General Chemistry
- PHYS 17200 - Modern Mechanics
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

17 Credits

Spring 1st Year

- ENGR 13200 - Transforming Ideas To Innovation II
- MA 16600 - Analytic Geometry And Calculus II
- CHM 11600 - General Chemistry
- CS 15900 - Programming Applications For Engineers
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 2nd Year

- ABE 20100 - Thermodynamics In Biological Systems I
- ABE 29000 - Sophomore Seminar
- MA 26100 - Multivariate Calculus
- BIOL 11000 - Fundamentals Of Biology I
- CHM 25700 - Organic Chemistry or
- CHM 25500 - Organic Chemistry
  AND
- CHM 25501 - Organic Chemistry Laboratory

17 Credits

Spring 2nd Year

- ABE 20200 - Thermodynamics In Biological Systems II
- MA 26200 - Linear Algebra And Differential Equations ♦
- CHE 32000 - Statistical Modeling And Quality Enhancement
- BCHM 30700 - Biochemistry
  Humanities or Social Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- ABE 30300 - Applications Of Physical Chemistry To Biological Processes
- ABE 30700 - Momentum Transfer In Food And Biological Systems
- ABE 37000 - Biological/Microbial Kinetics And Reaction Engineering
- MA 30300 - Differential Equations And Partial Differential Equations For Engineering And The Sciences
- BIOL 22100 - Introduction To Microbiology

16 Credits

Spring 3rd Year

- ABE 30100 - Numerical And Computational Modeling In Biological Engineering
- ABE 30400 - Bioprocess Engineering Laboratory
- ABE 30800 - Heat And Mass Transfer In Food And Biological Systems
- ABE 31400 - Design Of Electronic Systems
- ABE 45700 - Transport Operations In Food And Biological Engineering I
  Economics Selective - Credit Hours: 3.00

18 Credits

Fall 4th Year

- ABE 46000 - Sensors And Process Control
- ABE 49000 - Professional Practice In Agricultural And Biological Engineering
- ABE 55700 - Transport Operations In Food And Biological Systems II
- IPPH 56200 - Introduction To Pharmaceutical Manufacturing Processes
• Written or Oral Communication Selective - Credit Hours: 3.00
• UCC Humanities Selective - Credit Hours: 3.00

17 Credits

Spring 4th Year

• ABE 55800 - Process Design For Food And Biological Systems
• ABE 58000 - Process Engineering Of Renewable Resources
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

12 Credits

Notes

• Students must have a graduation index of 2.0
• The student is ultimately responsible for knowing and completing all degree requirements.
• Consultation with an advisor may result in an altered plan customized for a student.

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Environmental and Natural Resources Engineering, BSAGE

About the Program

The Environmental and Natural Resources Engineering program is accredited by the Engineering Accreditation Commission of ABET.

In Environmental and Natural Resources Engineering, students learn about ecosystem processes (the water cycle, nutrient transformation processes, and biological systems), how human activities such as agriculture affect these complex systems, and how to design sustainable solutions. Basic engineering principles, as well as some of the newest technological approaches, are applied to solve challenges related to soil and plant environments, surface and ground water quality, air quality, animal environments, and food safety. Graduates work in exciting careers in federal, state, and local government, engineering consulting firms, and industry, or pursue graduate study opportunities. Students in this program earn a Bachelor of Science in Agricultural Engineering, (BSAGE).
Some of the factors that contribute to Agricultural & Biological Engineering at Purdue University being a top ranked program:

- Multiple opportunities for interaction with faculty in laboratories and in classes
- Student Competitions, Clubs, Global Experiences
- Personalized advising and attention from faculty
- Practical curriculum for industrial careers
- Great opportunities for scholarships and internships
- Excellent placement record and starting salaries

Watch a video and then take a look at some senior projects.

Degree Requirements

128 Credits Required

Departmental/Program Major Courses (126-127 credits)

Required Major Courses (28 credits)

- ABE 20500 - Computations For Engineering Systems
- ABE 21000 - Thermodynamics Principles Of Engineering And Biological Systems
- ABE 29000 - Sophomore Seminar (satisfies Science, Technology, and Society for core)
- ABE 30500 - Physical Properties Of Biological Materials
- ABE 31400 - Design Of Electronic Systems
- ABE 32500 - Soil And Water Resource Engineering
- ABE 33000 - Design Of Machine Components
- ABE 45000 - Finite Element Method In Design And Optimization
- ABE 48400 - Project Planning And Management
- ABE 48600 - Agricultural Engineering Design
- ABE 49000 - Professional Practice In Agricultural And Biological Engineering

Other Departmental /Program Course Requirements (98 - 99 credits)

- ENGR 13100 - Transforming Ideas To Innovation I (satisfies Information Literacy for core)
- ENGR 13200 - Transforming Ideas To Innovation II
- CHM 11500 - General Chemistry (satisfies Science #1 for core)
- CHM 11600 - General Chemistry (satisfies Science #2 for core)
- MA 16500 - Analytic Geometry And Calculus I (satisfies Quantitative Reasoning for core)
- MA 16600 - Analytic Geometry And Calculus II
- MA 26100 - Multivariate Calculus
- MA 26200 - Linear Algebra And Differential Equations
- PHYS 17200 - Modern Mechanics
- PHYS 24100 - Electricity And Optics
- ME 27000 - Basic Mechanics I
- ME 27400 - Basic Mechanics II
- AGRY 25500 - Soil Science
• CE 34000 - Hydraulics and
• CE 34300 - Elementary Hydraulics Laboratory

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing (satisfies Written Communication for core)

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills (satisfies Oral Communication for core)

• Agricultural Selective - Credit Hours: 3.00
• Biological Science Selective - Credit Hours: 4.00
• Biological Science Selective - Credit Hours: 4.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• Engineering Technical Selective - Credit Hours: 3.00
• Engineering Technical Selective - Credit Hours: 3.00
• ENRE Technical Selective - Credit Hours: 3.00
• ENRE Technical Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Written and Oral Communication Selective - Credit Hours: 3.00

Electives (1 - 2 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree.
• 32 Upper division credits taken from Purdue
• 6 credits International Understanding
• 3 credits Multicultural Awareness
• 6 credits - 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ courses or above, and an additional 3 credit hours from the Written/Oral Communication or Social Science and Humanities categories must come from 30000+ or above or from a course with a required pre-requisite in the same department.
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Environmental and Natural Resources Engineering Supplemental Information

Program Requirements

Fall 1st Year

• UCC Approved Humanities Selective - Credit Hours: 3.00
• ENGR 13100 - Transforming Ideas To Innovation I
• MA 16500 - Analytic Geometry And Calculus I
• CHM 11500 - General Chemistry
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

16-17 Credits

Spring 1st Year

• ENGR 13200 - Transforming Ideas To Innovation II
• MA 16600 - Analytic Geometry And Calculus II
• CHM 11600 - General Chemistry
• PHYS 17200 - Modern Mechanics
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

17 Credits

Fall 2nd Year
- ABE 20500 - Computations For Engineering Systems
- ABE 29000 - Sophomore Seminar
- MA 26100 - Multivariate Calculus
- ME 27000 - Basic Mechanics I
- PHYS 24100 - Electricity And Optics
- Economics Selective - Credit Hours: 3.00

17 Credits

Spring 2nd Year

- ABE 21000 - Thermodynamics Principles Of Engineering And Biological Systems
- MA 26200 - Linear Algebra And Differential Equations
- ME 27400 - Basic Mechanics II
- NUCL 27300 - Mechanics Of Materials
- Biological Science Selective - Credit Hours: 4.00

17 Credits

Fall 3rd Year

- ABE 30500 - Physical Properties Of Biological Materials
- ABE 32500 - Soil And Water Resource Engineering
- AGRY 25500 - Soil Science
- CE 34000 - Hydraulics and
- CE 34300 - Elementary Hydraulics Laboratory
- Humanities or Social Science Selective - Credit Hours: 3.00

17 Credits

Spring 3rd Year

- ABE 31400 - Design Of Electronic Systems
- ABE 33000 - Design Of Machine Components
- ENRE Technical Selective - Credit Hours: 3.00
- Biological Science Selective - Credit Hours: 4.00
- Agricultural Selective - Credit Hours: 3.00

16 Credits

Fall 4th Year

- ABE 45000 - Finite Element Method In Design And Optimization
- ABE 48400 - Project Planning And Management
- ABE 49000 - Professional Practice In Agricultural And Biological Engineering
- ENRE Technical Selective - Credit Hours: 3.00
- Engineering Technical Selective - Credit Hours: 3.00
- Written or Oral Communication Selective - Credit Hours: 3.00

14 Credits

Spring 4th Year

- ABE 48600 - Agricultural Engineering Design
- Engineering Technical Selective - Credit Hours: 3.00
- Humanities or Social Selective - Credit Hours: 3.00
- Humanities or Social Selective (30000+) - Credit Hours: 3.00
- Elective - Credit Hours: 1.00-2.00

13-14 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.
- Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Minor

Agricultural Systems Management Minor

Requirements for the Minor (18 credits)

Required Courses (6 credits)

- ASM 10400 - Introduction To Agricultural Systems
- ASM 10500 - Agricultural Systems Computations And Communication
Elective Courses - Choose 4 (12 credits)

Only three credits may be from courses other than Agricultural Systems Management (ASM).

At least six credits must be 30000+ level courses.

No more than 6 credits of special problems (ASM 49000 and/or 59000) may apply to the minor and application of the special problems to the minor must be stated on the course contract form.

- AGEC 31000 - Farm Organization
- AGEC 33000 - Management Methods For Agricultural Business
- AGRY 37500 - Crop Production Systems
- ANSC 22100 - Principles Of Animal Nutrition
- ASM 20100 - Construction And Maintenance
- ASM 21100 - Technical Graphic Communications
- ASM 22200 - Crop Production Equipment
- ASM 23600 - Environmental Systems Management
- ASM 24500 - Materials Handling And Processing
- ASM 33300 - Facilities Planning And Management
- ASM 34500 - Power Units And Power Trains
- ASM 42000 - Electric Power And Controls
- ASM 42200 - Advanced Machine Technology For Agricultural Crop Production
- ASM 49000 - Special Problems
- ASM 49100 - Special Topics
- ASM 51000 - Agrosecurity-Emergency Management For Agricultural Production Operations
- ASM 53000 - Power And Machinery Management
- ASM 54000 - Geographic Information System Application
- ASM 55000 - Grain Drying And Storage
- ASM 59000 - Special Problems
- ASM 59100 - Special Topics

Notes

- Department Permission is not required to enroll in this minor.

Disclaimer

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Pre-Program

Pre-Agricultural and Biological Engineering

Upon successful completion of one year of pre-engineering curriculum, students can move to their professional program of choice within Agricultural and Biological Engineering. Department of Agricultural and Biological Engineering
Fall 1st Year (16-17 credits)

- CHM 11500 - General Chemistry (satisfies Science for core)
- ENGR 13100 - Transforming Ideas To Innovation I (satisfies Information Literacy for core)
- MA 16500 - Analytic Geometry And Calculus I (satisfies Quantitative Reasoning for core)
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Human Culture Humanities Selective - Credit Hours: 3.00

Spring 1st Year (16-17 credits)

- ENGR 13200 - Transforming Ideas To Innovation II
- MA 16600 - Analytic Geometry And Calculus II
- PHYS 17200 - Modern Mechanics
- CHM 11600 - General Chemistry or
- CS 15900 - Programming Applications For Engineers
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

Notes

- MA 16100 and MA 16200 are alternatives to MA 16500 and 16600, respectively.
- Students pursuing the Agricultural Engineering major may take CHM 11600 or CS 15900. All others should take CHM 11600.
- Students must earn a C- or better in all courses used to fulfill the above requirements if the grade is posted to the Purdue transcript, with the exception of the UCC Approved Humanities Selective.
- Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Department of Agricultural Economics

Overview
The Department of Agricultural Economics has a long history of preparing students for careers in the food and agricultural industry as well as preparation for graduate and law school. The variation of majors offers students the opportunity to focus in agribusiness, economics, sales and marketing, or farm management.

Students have the opportunity to learn from faculty who lead the department's Center for Food and Agricultural Business and the Center for Commercial Agriculture. The Center for Food and Agricultural Business combines research with real-world applications to offer seminars, workshops, and custom programs to the same companies that are hiring our undergraduate students for internships and full-time positions. The Center for Commercial Agriculture has a vision to "be the leading source of management education and knowledge generation for farmers" bringing a wealth of experienced faculty to guide students interested in a career path in production agriculture.

Students are advised by a passionate group of academic advisors who encourage students to enhance their Purdue experience by participating in transformational experiences. These experiences range from attending a national or campus leadership conference, studying abroad, competing in an academic competition, completing an undergraduate research project, serving as an officer in one of the numerous campus organizations, etc.

Department of Agricultural Economics Website

Faculty

Contact Information

Department of Agricultural Economics

Purdue University

Krannert Building
403 West State Street
West Lafayette, IN 47907
Phone: (765) 494-4201
Email: LeeAnn Williams

Prospective Student Website

Current Students Website

The Advising & Student Services Office for the department is located in Room 681 of the KRAN Building.

Graduate Information

For Graduate Information please see Agricultural Economics Graduate Program Information.

Baccalaureate

Agribusiness: Agribusiness Management Concentration, BS

About the Program
Increasing opportunities exist for agricultural graduates to enter managerial positions in business. These businesses may be large or small and may be organized as proprietorships, partnerships, corporations, or cooperatives. They include meat, dairy, and poultry processing industries, grain handling, feed manufacturing, and seed and fertilizer firms; transportation and storage concerns; and wholesale and retail food businesses. Although this Department of Agricultural Economics curriculum gives special emphasis to agriculturally related businesses, its requirements are broad enough to allow adequate preparation for nonagricultural businesses. This option also has enough flexibility to permit you to prepare for an international career in agricultural business and can serve as a foundation for graduate school.

Agricultural Economics Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (33 credits)

Required Major Courses (30 credits)

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- AGEC 21700 - Economics
- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- AGEC 32700 - Principles Of Food And Agribusiness Marketing
- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 42400 - Financial Management Of Agricultural Business
- AGEC 43000 - Agricultural And Food Business Strategy

- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
- AGEC 45100 - Applied Econometrics

- AGEC 45500 - Agricultural Law or
- MGMT 45500 - Legal Background For Business I

Major Selectives (3 credits)

- AGEC Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (69-70 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning for core)
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)
• MGMT 20000 - Introductory Accounting or
  MGMT 20010 - Business Accounting

• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
  ENGL 10800 - Accelerated First-Year Composition or
  HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
  COM 21700 - Science Writing And Presentation or
  EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Biological Science Selective - Credit Hours: 4.00
• Biological Science Selective - Credit Hours: 4.00
• Mathematics or Science Selective - Credit Hours: 3.00
• Food and Agribusiness Management Selective - Credit Hours: 3.00
• Food and Agribusiness Management Selective - Credit Hours: 3.00
• Human Relations Management Selective - Credit Hours: 3.00
• Industrial Technology Selective - Credit Hours: 3.00
• UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communications Selective - Credit Hours: 3.00
• Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (17-18 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Agribusiness: Agribusiness Management Supplemental Information

Program Requirements

Fall 1st Year

• AGEC 20200 - Spreadsheet Use In Agricultural Business
• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11200 - Introduction To Agricultural Economics Academic Programs
• Biological Sciences Selective - Credit Hours: 4.00
• MA 16010 - Applied Calculus I
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

15-16 Credits

Spring 1st Year

• AGEC 21700 - Economics
• Biological Sciences Selective - Credit Hours: 4.00
• UCC Humanities Selective - Credit Hours: 3.00
• UCC Science, Technology, & Society Selective - Credit Hours: 3.00
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 2nd Year
• AGEC 22000 - Economics Of Agricultural Markets
• AGEC 29800 - Sophomore Seminar
• CHM 11100 - General Chemistry
• STAT 30100 - Elementary Statistical Methods
• Humanities or Social Science Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

• AGEC 33000 - Management Methods For Agricultural Business
• CHM 11200 - General Chemistry
• MGMT 20000 - Introductory Accounting or
• MGMT 20010 - Business Accounting
• Human Relations Management Selective - Credit Hours: 3.00
• Written or Oral Communication Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

• AGEC 32700 - Principles Of Food And Agribusiness Marketing
• AGEC 35200 - Quantitative Techniques For Firm Decision Making or
• AGEC 45100 - Applied Econometrics
• AGEC 42400 - Financial Management Of Agricultural Business
• Industrial Technology Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

• AGEC 45500 - Agricultural Law or
• MGMT 45500 - Legal Background For Business I
• Food and Agribusiness Management Selective - Credit Hours: 3.00
• Mathematics or Science Selective - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

15 Credits
Fall 4th Year

- Agricultural Economics Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+level) - Credit Hours: 3.00
- Electives - Credit Hours: 5.00

14 Credits

Spring 4th Year

- AGE 43000 - Agricultural And Food Business Strategy
- Food and Agribusiness Management Selective - Credit Hours: 3.00
- Electives - Credit Hours: 6.00-7.00

12-13 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.
- Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Agribusiness: Agricultural Finance Concentration, BS

About the Program
Increasing opportunities exist for agricultural graduates to enter managerial positions in business. These businesses may be large or small and may be organized as proprietorships, partnerships, corporations, or cooperatives. They include meat, dairy, and poultry processing industries, grain handling, feed manufacturing, and seed and fertilizer firms; transportation and storage concerns; and wholesale and retail food businesses. Although this Department of Agricultural Economics curriculum gives special emphasis to agriculturally related businesses, its requirements are broad enough to allow adequate preparation for nonagricultural businesses. This option also has enough flexibility to permit you to prepare for an international career in agricultural business and can serve as a foundation for graduate school.

Agricultural Economics Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (39 credits)

Required Major Courses (36 credits)

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- AGEC 21700 - Economics
- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 32700 - Principles Of Food And Agribusiness Marketing
- AGEC 43000 - Agricultural And Food Business Strategy
- AGEC 42400 - Financial Management Of Agricultural Business
- AGEC 52400 - Agricultural Finance

- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
- AGEC 45100 - Applied Econometrics

- AGEC 42500 - Estate Planning And Property Transfer or
- AGEC 45600 - Federal Income Tax Law

- AGEC 45500 - Agricultural Law or
- MGMT 45500 - Legal Background For Business I

Major Selectives (3 credits)

- AGEC Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (63-64 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning for core)
• MGMT 20100 - Management Accounting I
• STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)

• MGMT 20000 - Introductory Accounting or
• MGMT 20010 - Business Accounting

• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Biological Science Selective - Credit Hours: 4.00
• Biological Science Selective - Credit Hours: 4.00
• Mathematics or Science Selective - Credit Hours: 3.00
• Food and Agribusiness Management Selective - Credit Hours: 3.00
• UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective Selective 30000+ level - Credit Hours: 3.00
• Written or Oral Communications Selective - Credit Hours: 3.00
• Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (17-18 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Agribusiness: Agricultural Finance Supplemental Information

Program Requirements

Fall 1st Year

• AGEC 20200 - Spreadsheet Use In Agricultural Business
• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11200 - Introduction To Agricultural Economics Academic Programs
• MA 16010 - Applied Calculus I ♦
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• Biological Sciences Selective - Credit Hours: 4.00

15-16 Credits

Spring 1st Year

• AGEC 21700 - Economics
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Biological Sciences Selective - Credit Hours: 4.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• UCC STS Selective (satisfies Science, Technology, & Society for core) - Credit Hours: 3.00
16 Credits

Fall 2nd Year

- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- CHM 11100 - General Chemistry
- STAT 30100 - Elementary Statistical Methods
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- AGEC 33000 - Management Methods For Agricultural Business
- CHM 11200 - General Chemistry

- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting

- Humanities or Social Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- AGEC 32700 - Principles Of Food And Agribusiness Marketing
- AGEC 42400 - Financial Management Of Agricultural Business
- MGMT 20100 - Management Accounting I

- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
- AGEC 45100 - Applied Econometrics

- Elective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- AGEC 45500 - Agricultural Law or
- MGMT 45500 - Legal Background For Business I

- Agricultural Economics Selective - Credit Hours: 3.00
- Food and Agribusiness Management Selective - Credit Hours: 3.00
Mathematics or Science Selective - Credit Hours: 3.00
Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

• AGEC 42500 - Estate Planning And Property Transfer or
• AGEC 45600 - Federal Income Tax Law

• Economics Selective - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
• Electives - Credit Hours: 5.00

14 Credits

Spring 4th Year

• AGEC 43000 - Agricultural And Food Business Strategy
• AGEC 52400 - Agricultural Finance
• Humanities or Social Science Selective (30000+level) - Credit Hours: 3.00
• Elective - Credit Hour: 3.00-4.00

12-13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.
Consultation with an advisor may result in an altered plan customized for an individual student.
Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.
For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer
The student is ultimately responsible for knowing and completing all degree requirements.

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**Agribusiness: Agricultural Marketing Concentration, BS**

**About the Program**

Increasing opportunities exist for agricultural graduates to enter managerial positions in business. These businesses may be large or small and may be organized as proprietorships, partnerships, corporations, or cooperatives. They include meat, dairy, and poultry processing industries, grain handling, feed manufacturing, and seed and fertilizer firms; transportation and storage concerns; and wholesale and retail food businesses. Although this Department of Agricultural Economics curriculum gives special emphasis to agriculturally related businesses, its requirements are broad enough to allow adequate preparation for nonagricultural businesses. This option also has enough flexibility to permit you to prepare for an international career in agricultural business and can serve as a foundation for graduate school.

Agricultural Economics Website

**Degree Requirements**

**120 Credits Required**

Departmental/Program Major Courses (38 credits)

**Required Major Courses (32 credits)**

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- AGEC 21700 - Economics
- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- AGEC 32700 - Principles Of Food And Agribusiness Marketing
- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGEC 42400 - Financial Management Of Agricultural Business
- AGEC 42700 - Advanced Agribusiness Marketing
- AGEC 42900 - Agribusiness Marketing Workshop
- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
- AGEC 45100 - Applied Econometrics

**Major Selectives (6 credits)**

- AGEC Selective - Credit Hours: 3.00
- AGEC Selective - Credit Hours: 3.00
Other Departmental /Program Course Requirements (63-64 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning for core)
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)

- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Biological Science Selective - Credit Hours: 4.00
- Biological Science Selective - Credit Hours: 4.00
- Mathematics or Science Selective - Credit Hours: 3.00
- Food and Agribusiness Management Selective - Credit Hours: 3.00
- Food and Agribusiness Management Selective - Credit Hours: 3.00
- UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communications Selective - Credit Hours: 3.00
- Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (18-19 credits)

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Agribusiness: Agricultural Marketing Supplemental Information

Program Requirements

Fall 1st Year

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- MA 16010 - Applied Calculus I ♦

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- Biological Sciences Selective - Credit Hours: 4.00

15-16 Credits

Spring 1st Year

- AGEC 21700 - Economics

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Biological Sciences Selective - Credit Hours: 4.00
- UCC Humanities Selective - Credit Hours: 3.00
- UCC Science, Technology, & Society Selective - Credit Hours: 3.0

16 Credits

Fall 2nd Year

- AGE 22000 - Economics Of Agricultural Markets
- AGE 29800 - Sophomore Seminar
- CHM 11100 - General Chemistry
- STAT 30100 - Elementary Statistical Methods
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- AGE 33000 - Management Methods For Agricultural Business
- CHM 11200 - General Chemistry
- MGMT 20000 - Introductory Accounting or
  MGMT 20010 - Business Accounting
- Humanities or Social Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- AGE 32700 - Principles Of Food And Agribusiness Marketing
- AGE 33100 - Principles Of Selling In Agricultural Business
- AGE 42400 - Financial Management Of Agricultural Business
- AGE 35200 - Quantitative Techniques For Firm Decision Making or
  AGE 45100 - Applied Econometrics
- Elective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- Agricultural economics Selective - Credit Hours: 3.00
- Food and Agribusiness Management Selective - Credit Hours: 3.00
- Mathematics or Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- Elective - Credit Hours 3.00

15 Credits

**Fall 4th Year**

- AGE 42700 - Advanced Agribusiness Marketing
- Economics Selective - Credit Hours: 3.00
- Food and Agribusiness Management Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

12 Credits

**Spring 4th Year**

- AGE 42900 - Agribusiness Marketing Workshop
- Agricultural Economics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+level) - Credit Hours: 3.00
- Electives - Credit Hours: 6.00 - 7.00

14-15 Credits

**Notes**

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

**Foreign Language Courses**

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

**Critical Course**

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.
Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Agribusiness: Commodity Marketing Concentration, BS

About the Program

Increasing opportunities exist for agricultural graduates to enter managerial positions in business. These businesses may be large or small and may be organized as proprietorships, partnerships, corporations, or cooperatives. They include meat, dairy, and poultry processing industries, grain handling, feed manufacturing, and seed and fertilizer firms; transportation and storage concerns; and wholesale and retail food businesses. Although this Department of Agricultural Economics curriculum gives special emphasis to agriculturally related businesses, its requirements are broad enough to allow adequate preparation for nonagricultural businesses. This option also has enough flexibility to permit you to prepare for an international career in agricultural business and can serve as a foundation for graduate school.

Agricultural Economics Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (39 credits)

Required Major Courses (36 credits)

- AGE 20200 - Spreadsheet Use In Agricultural Business
- AGE 20300 - Introductory Microeconomics For Food And Agribusiness
- AGE 21700 - Economics
- AGE 22000 - Economics Of Agricultural Markets
- AGE 29800 - Sophomore Seminar
- AGE 30500 - Agricultural Prices
- AGE 32100 - Principles Of Commodity Marketing
- AGE 32700 - Principles Of Food And Agribusiness Marketing
- AGE 33000 - Management Methods For Agricultural Business
- AGE 42100 - Advanced Commodity Marketing
- AGE 42400 - Financial Management Of Agricultural Business
- AGE 43000 - Agricultural And Food Business Strategy
- AGE 35200 - Quantitative Techniques For Firm Decision Making or
- AGE 45100 - Applied Econometrics
Major Selectives (3 credits)

- AGEC Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (63-64 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning for core)
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)
- MGMT 20000 - Introductory Accounting or
  MGMT 20010 - Business Accounting
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
  ENGL 10800 - Accelerated First-Year Composition or
  HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
  COM 21700 - Science Writing And Presentation or
  EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Agronomy or Animal Science Selective at 20000+ - Credit Hours: 3.00
- Biological Science Selective - Credit Hours: 4.00
- Biological Science Selective - Credit Hours: 4.00
- Mathematics or Science Selective - Credit Hours: 3.00
- Food and Agribusiness Management Selective - Credit Hours: 3.00
- UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communications Selective - Credit Hours: 3.00
- Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (17-18 credits)

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
Science #2
Science, Technology, and Society
Written Communication
Oral Communication
Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Agribusiness: Commodity Marketing Supplemental Information

Program Requirements

Fall 1st Year

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- MA 16010 - Applied Calculus I ♦
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- Biological Sciences Selective - Credit Hours: 4.00

15-16 Credits

Spring 1st Year

- AGEC 21700 - Economics
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Biological Sciences Selective - Credit Hours: 4.00
- UCC Humanities Selective - Credit Hours: 3.00
- UCC Science, Technology, & Society Selective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

- AGE 22000 - Economics Of Agricultural Markets
- AGE 29800 - Sophomore Seminar
- CHM 11100 - General Chemistry
- STAT 30100 - Elementary Statistical Methods
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- AGE 33000 - Management Methods For Agricultural Business
- Written or Oral Communication Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- CHM 11200 - General Chemistry

- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting

15 Credits

Fall 3rd Year

- AGE 32100 - Principles Of Commodity Marketing
- AGE 32700 - Principles Of Food And Agribusiness Marketing
- AGE 42400 - Financial Management Of Agricultural Business

- AGE 35200 - Quantitative Techniques For Firm Decision Making or
- AGE 45100 - Applied Econometrics

- Elective - Credit Hours: 3.00

16 Credits
Spring 3rd Year

- AGEC 42100 - Advanced Commodity Marketing
- Food and Agribusiness Management Selective - Credit Hours: 3.00
- Mathematics or Science Selective - Credit Hours: 3.00
- Agronomy or Animal Science Selective at 20000+ - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AGEC 30500 - Agricultural Prices
- Agricultural Economics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+level) - Credit Hours: 3.00
- Electives - Credit Hours: 5.00

14 Credits

Spring 4th Year

- AGEC 43000 - Agricultural And Food Business Strategy
- Economics Selective - Credit Hours: 3.00
- Humanities or Social Science - Credit Hours: 3.00
- Electives - Credit Hours: 3.00 - 4.00

12-13 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.
- Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

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Critical Course

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Agribusiness: Food Marketing Concentration, BS

About the Program

Increasing opportunities exist for agricultural graduates to enter managerial positions in business. These businesses may be large or small and may be organized as proprietorships, partnerships, corporations, or cooperatives. They include meat, dairy, and poultry processing industries, grain handling, feed manufacturing, and seed and fertilizer firms; transportation and storage concerns; and wholesale and retail food businesses. Although this Department of Agricultural Economics curriculum gives special emphasis to agriculturally related businesses, its requirements are broad enough to allow adequate preparation for nonagricultural businesses. This option also has enough flexibility to permit you to prepare for an international career in agricultural business and can serve as a foundation for graduate school.

Agricultural Economics Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (33 credits)

Required Major Courses (33 credits)

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- AGEC 21700 - Economics
- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- AGEC 32700 - Principles Of Food And Agribusiness Marketing
- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGEC 33300 - Food Distribution - A Retailing Perspective
- AGEC 42400 - Financial Management Of Agricultural Business
- AGEC 42700 - Advanced Agribusiness Marketing
- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
- AGEC 45100 - Applied Econometrics

Other Departmental /Program Course Requirements (68-69 credits)
• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11200 - Introduction To Agricultural Economics Academic Programs
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• FS 16100 - Science Of Food
• FS 24500 - Food Packaging
• FS 34000 - Introduction To Food Law And Regulations
• MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning for core)
• STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)
• MGMT 20000 - Introductory Accounting or
  MGMT 20010 - Business Accounting
• NUTR 30300 - Essentials Of Nutrition or
  NUTR 31500 - Fundamentals Of Nutrition
• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing
• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills
• Biomedical Science Selective - Credit Hours: 4.00
• Biomedical Science Selective - Credit Hours: 4.00
• Mathematics or Science Selective - Credit Hours: 3.00
• UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
• Food and Agribusiness Management Selective - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communications Selective - Credit Hours: 3.00
• Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (18-19 credits)

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Agribusiness: Food Marketing Supplemental Information

Program Requirements

Fall 1st Year

• AGEC 20200 - Spreadsheet Use In Agricultural Business
• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11200 - Introduction To Agricultural Economics Academic Programs
• MA 16010 - Applied Calculus I ♦

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• Biological Sciences Selective - Credit Hours: 4.00

15-16 Credits

Spring 1st Year

• AGEC 21700 - Economics

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Biological Sciences Selective - Credit Hours: 4.00
• UCC Humanities Selective - Credit Hours: 3.00
• UCC Science, Technology, & Society Selective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

• AGEC 22000 - Economics Of Agricultural Markets
• AGEC 29800 - Sophomore Seminar
• CHM 11100 - General Chemistry
• FS 16100 - Science Of Food
• STAT 30100 - Elementary Statistical Methods
• Humanities or Social Science Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

• AGEC 33000 - Management Methods For Agricultural Business
• CHM 11200 - General Chemistry
• FS 24500 - Food Packaging

• MGMT 20000 - Introductory Accounting or
• MGMT 20010 - Business Accounting

• Humanities or Social Science Selective - Credit Hours: 3.00
• Written or Oral Communication Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

• AGEC 32700 - Principles Of Food And Agribusiness Marketing
• AGEC 33100 - Principles Of Selling In Agricultural Business
• AGEC 42400 - Financial Management Of Agricultural Business

• AGEC 35200 - Quantitative Techniques For Firm Decision Making or
• AGEC 45100 - Applied Econometrics

• Elective - Credit Hours: 3.00

16 Credits
Spring 3rd Year

- AGEC 33300 - Food Distribution - A Retailing Perspective
- FS 34000 - Introduction To Food Law And Regulations
- NUTR 30300 - Essentials Of Nutrition or
- NUTR 31500 - Fundamentals Of Nutrition
- Mathematics or Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 6.00

16 Credits

Fall 4th Year

- AGEC 42700 - Advanced Agribusiness Marketing
- Economics Selective - Credit Hours: 3.00
- Food and Agribusiness Management Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

12 Credits

Spring 4th Year

- Humanities or Social Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 6.00 - 7.00

12-13 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.
- Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course
The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.
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Agricultural Economics: Applied Agricultural Economics Concentration, BS

About the Program

Agricultural economics graduates apply economic principles and use quantitative tools to analyze data which assists the agricultural sector in making better decisions. These decision involve a wide array of issues including price analysis, international development, international trade, environmental resources, and agricultural policy.

Agricultural Economics Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (95-96 credits)

Required Major Courses (32 credits)

Required AGEC courses (14 credits)

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
- AGEC 21700 - Economics
- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
- AGEC 45100 - Applied Econometrics

Major Selectives - (18 credits)

- AGEC Selective - Credit Hours: 3.00
- AGEC Selective - Credit Hours: 3.00
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- AGEC Selective - Credit Hours: 3.00
- AGEC Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (63-64 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning for core)
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)

- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Biological Science Selective - Credit Hours: 4.00
- Biological Science Selective - Credit Hours: 4.00
- Mathematics or Science Selective - Credit Hours: 3.00
- UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communications Selective - Credit Hours: 3.00
- Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (24 - 25 credits)

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

**University Core Requirements**

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

**Prerequisite Information:**

For current pre-requisites for courses, click here.

**Additional Degree Requirements**

Click here for Agricultural Economics: Applied Agricultural Economics Supplemental Information

**Program Requirements**

**Fall 1st Year**

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- MA 16010 - Applied Calculus I ♦
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- Biological Sciences Selective - Credit Hours: 4.00

15-16 Credits

**Spring 1st Year**
- AGEC 21700 - Economics
- COM 11400 - Fundamentals Of Speech Communication or
  COM 21700 - Science Writing And Presentation or
  EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Biological Sciences Selective - Credit Hours: 4.00
- UCC Humanities Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- CHM 11100 - General Chemistry
- STAT 30100 - Elementary Statistical Methods
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- CHM 11200 - General Chemistry
- MGMT 20000 - Introductory Accounting or
  MGMT 20010 - Business Accounting
- Agricultural Economics Selective - Credit Hours: 3.00
- Written or Oral Communication Selective - Credit Hours: 3.00
- UCC Science, Technology, & Society Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
  AGEC 45100 - Applied Econometrics
- Agricultural Economics Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
15 Credits

Spring 3rd Year

- Mathematics or Science Selection - Credit Hours: 3.00
- Agricultural Economics Selectives - Credit Hours: 6.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- Agricultural Economics Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Electives - Credit Hours: 6.00

15 Credits

Spring 4th Year

- Agricultural Economics Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Electives - Credit Hours: 6.00 - 7.00

12-13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course
The course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements. The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Agricultural Economics: Commodity Marketing Concentration, BS

About the Program

Agricultural economics graduates apply economic principles and use quantitative tools to analyze data which assists the agricultural sector in making better decisions. These decisions involve a wide array of issues including price analysis, international development, international trade, environmental resources, and agricultural policy.

Agricultural Economics Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (95-96 credits)

Required AGEC courses (26 credits)

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- AGEC 21700 - Economics
- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- AGEC 30500 - Agricultural Prices
- AGEC 32100 - Principles Of Commodity Marketing
- AGEC 42100 - Advanced Commodity Marketing
- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
- AGEC 45100 - Applied Econometrics
- AGEC 41100 - Farm Management or
- AGEC 43000 - Agricultural And Food Business Strategy

Major Selectives - 3 credits
• AGEC Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (66-67 credits)

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11200 - Introduction To Agricultural Economics Academic Programs
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning for core)
• STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)
• MGMT 20000 - Introductory Accounting or
  MGMT 20010 - Business Accounting
• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
  ENGL 10800 - Accelerated First-Year Composition or
  HONR 19903 - Interdisciplinary Approaches In Writing
• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
  COM 21700 - Science Writing And Presentation or
  EDPS 31500 - Collaborative Leadership: Interpersonal Skills

  Agronomy or Animal Science Selective at 20000+ - Credit Hours: 3.00
  Biological Science Selective - Credit Hours: 4.00
  Biological Science Selective - Credit Hours: 4.00
  Mathematics or Science Selective - Credit Hours: 3.00
  UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
  Food and Agribusiness Management Selective - Credit Hours: 3.00
  Economics Selective - Credit Hours: 3.00
  Economics Selective - Credit Hours: 3.00
  UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
  Humanities or Social Science Selective - Credit Hours: 3.00
  Humanities or Social Science Selective - Credit Hours: 3.00
  Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
  Written or Oral Communications Selective - Credit Hours: 3.00
  Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (24 - 25 credits)

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Agricultural Economics: Commodity Marketing Supplemental Information

Program Requirements

Fall 1st Year

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- MA 16010 - Applied Calculus I ♦
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Biological Sciences Selective - Credit Hours: 4.00

15-16 Credits

Spring 1st Year

- AGEC 21700 - Economics

- COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Biological Sciences Selective - Credit Hours: 4.00
• UCC Humanities Selective - Credit Hours: 3.00
• UCC Science, Technology, & Society Selective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

• AGE 22000 - Economics Of Agricultural Markets
• AGE 29800 - Sophomore Seminar
• CHM 11100 - General Chemistry
• STAT 30100 - Elementary Statistical Methods
• Humanities or Social Science Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

• CHM 11200 - General Chemistry

• MGMT 20000 - Introductory Accounting or
• MGMT 20010 - Business Accounting

• Agricultural Economics Selective - Credit Hours: 3.00
• Written or Oral Communication Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

• AGE 32100 - Principles Of Commodity Marketing

• AGE 35200 - Quantitative Techniques For Firm Decision Making or
• AGE 45100 - Applied Econometrics

• Economics Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

15 Credits
Spring 3rd Year

- AGEC 42100 - Advanced Commodity Marketing
- Agronomy or Animal Science Selective at 20000+ - Credit Hours: 3.00
- Math/Science Selection - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AGEC 30500 - Agricultural Prices
- AGEC 41100 - Farm Management or
  AGEC 43000 - Agricultural And Food Business Strategy
- Food and Agribusiness Management Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Economics Selective - Credit Hours: 3.00
- Electives - Credit Hours: 9.00 - 10.00

12-13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course
The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Agricultural Economics: Quantitative Analysis Concentration, BS

About the Program

Agricultural economics graduates apply economic principles and use quantitative tools to analyze data which assists the agricultural sector in making better decisions. These decisions involve a wide array of issues including price analysis, international development, international trade, environmental resources, and agricultural policy.

Agricultural Economics Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (95-96 credits)

Required Major Courses (26 credits)

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
- AGEC 21700 - Economics
- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGEC 37500 - The Process Of Economic Research
- AGEC 45100 - Applied Econometrics
- AGEC 49900 - Thesis
- AGEC 51600 - Mathematical Tools For Agricultural And Applied Economics

Other Departmental /Program Course Requirements (69-70 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- ECON 34000 - Intermediate Microeconomic Theory
- MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II (satisfies Information Literacy for core)
- STAT 30100 - Elementary Statistical Methods
- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Biological Science Selective - Credit Hours: 4.00
- Biological Science Selective - Credit Hours: 4.00
- UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communications Selective - Credit Hours: 3.00
- Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (24-25 credits)

- Elective - Credit Hours: 24.00-25.00

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:
College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Agricultural Economics: Quantitative Analysis Supplemental Information

Program Requirements

Fall 1st Year

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- MA 16010 - Applied Calculus I ♦
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Biological Science Selective - Credit Hours: 4.00

15-16 Credits

Spring 1st Year

- AGEC 21700 - Economics
- MA 16020 - Applied Calculus II
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Biological Sciences Selective - Credit Hours: 4.00
- UCC Humanities Selective - Credit Hours: 3.00
16 Credits

Fall 2nd Year

- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- CHM 11100 - General Chemistry
- STAT 30100 - Elementary Statistical Methods
- UCC Science, Technology, & Society Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- AGEC 37500 - The Process Of Economic Research
- AGEC 45100 - Applied Econometrics
- CHM 11200 - General Chemistry

- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting

- Economics Selective - Credit Hours: 3.00
- Written or Oral Communication Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGEC 49900 - Thesis
- Economics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

14 Credits

Spring 3rd Year

- AGEC 49900 - Thesis
- Economics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
14 Credits

Fall 4th Year

- AGEC 49900 - Thesis
- AGEC 51600 - Mathematical Tools For Agricultural And Applied Economics
- ECON 34000 - Intermediate Microeconomic Theory
- Humanities or Social Science Selective (30000+level) - Credit Hours: 3.00
- Electives - Credit Hours: 6.00

16 Credits

Spring 4th Year

- Economics Selective - Credit Hours: 3.00
- Electives - Credit Hours: 9.00-10.00

12-13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.
Farm Management, BS

About the Program

Farm Management prepares people for managing the home farm, professional farm management, or understanding the challenge of managing a farm. Emphasis is placed on production, finance, marketing, and management strategies.

Agricultural Economics Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (103-104 credits)

Required Major Courses (28 credits)

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
- AGEC 21700 - Economics
- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- AGEC 31000 - Farm Organization
- AGEC 32100 - Principles Of Commodity Marketing
- AGEC 41100 - Farm Management
- AGEC 42400 - Financial Management Of Agricultural Business

- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
- AGEC 45100 - Applied Econometrics

Other Departmental /Program Course Requirements (75-76 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 16010 - Applied Calculus I ♦ (satisfies Quantitative Reasoning for core)
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)

- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Biological Science Selective - Credit Hours: 4.00
• Biological Science Selective - Credit Hours: 4.00
• Mathematics or Science Selective - Credit Hours: 3.00
• Farm Management Business Selective - Credit Hours: 3.00
• Farm Management Business Selective - Credit Hours: 3.00
• Farm Management Business Selective - Credit Hours: 3.00
• Production Agriculture Selective - Credit Hours: 3.00
• Production Agriculture Selective - Credit Hours: 3.00
• Production Agriculture Selective - Credit Hours: 3.00
• UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communications Selective - Credit Hours: 3.00
• Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (16-17 credits)

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Requirements

Click here for Farm Management Supplemental Information

Program Requirements

Fall 1st Year

• AGEC 20200 - Spreadsheet Use In Agricultural Business
• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11200 - Introduction To Agricultural Economics Academic Programs
• CHM 11100 - General Chemistry
• MA 16010 - Applied Calculus I ♦
  
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year

• AGEC 21700 - Economics
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• CHM 11200 - General Chemistry

• UCC Humanities Selective - Credit Hours: 3.00
• UCC Science, Technology, & Society Selective - Credit Hours: 3.00
• Elective - Credit Hours: 1.00

16 Credits

Fall 2nd Year

• AGEC 22000 - Economics Of Agricultural Markets
• AGEC 29800 - Sophomore Seminar
• STAT 30100 - Elementary Statistical Methods
• Biological Science Selective - Credit Hours: 4.00
• Production Agriculture Selective - Credit Hours: 3.00
• Elective - Credit Hours: 2.00

16 Credits

Spring 2nd Year

• AGEC 31000 - Farm Organization
• Biological Science Selective - Credit Hours: 4.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Written or Oral Communication Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

• AGEC 32100 - Principles Of Commodity Marketing
• AGEC 35200 - Quantitative Techniques For Firm Decision Making or
• AGEC 45100 - Applied Econometrics
• MGMT 20000 - Introductory Accounting or
• MGMT 20010 - Business Accounting
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
• Farm Management Business Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

• Economics Selective - Credit Hours: 3.00
• Farm Management Business Selective - Credit Hours: 3.00
• Mathematics or Science Selective - Credit Hours: 3.00
• Production Agriculture Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

• AGEC 41100 - Farm Management
• AGEC 42400 - Financial Management Of Agricultural Business
• Production Agriculture Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+level) - Credit Hours: 3.00

14 Credits

Spring 4th Year

• Farm Management Business Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Electives - Credit Hours: 7.00 - 8.00

13-14 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Sales and Marketing, BS

About the Program

Sales and marketing graduate complete a degree program with a focus in sales, marketing, and management that give them the ability to enter numerous entry-level sales positions for agricultural and non-agricultural firms. These positions lead to professional careers in sales or marketing management. A wide spectrum of agricultural marketing organizations, food
manufacturing companies, and farm supply industries are marketing-oriented and depend extensively on agricultural graduates who are well-trained in marketing tools and concepts.

Agricultural Economics Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (100-101 credits)

Required Major Courses (37 credits)

- AGEC 20200 - Spreadsheet Use In Agricultural Business
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- AGEC 21700 - Economics
- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 29800 - Sophomore Seminar
- AGEC 32700 - Principles Of Food And Agribusiness Marketing
- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGEC 42400 - Financial Management Of Agricultural Business
- AGEC 42700 - Advanced Agribusiness Marketing
- AGEC 43000 - Agricultural And Food Business Strategy
- AGEC 43100 - Advanced Agri-Sales And Marketing
- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
- AGEC 45100 - Applied Econometrics

Other Departmental/Program Course Requirements (63-64 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11200 - Introduction To Agricultural Economics Academic Programs
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MGMT 45500 - Legal Background For Business I
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)
- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Biological Science Selective - Credit Hours: 4.00
• Biological Science Selective - Credit Hours: 4.00
• Communication Marketing Selective - Credit Hours: 3.00
• Mathematics or Science Selective - Credit Hours: 3.00
• UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communications Selective - Credit Hours: 3.00
• Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (19-20 credits)

• Elective - Credit Hours: 19.00-20.00

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Requirements

Click here for Sales and Marketing Supplemental Information

Program Requirements

Fall 1st Year

• AGEC 20200 - Spreadsheet Use In Agricultural Business
• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness ♦
• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11200 - Introduction To Agricultural Economics Academic Programs
• MA 16010 - Applied Calculus I ♦

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• Biological Sciences Selective - Credit Hours: 4.00

15-16 Credits

Spring 1st Year

• AGEC 21700 - Economics

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Biological Sciences Selective - Credit Hours: 4.00
• UCC Humanities Selective - Credit Hours: 3.00
• UCC Science, Technology, & Society Selective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

• AGEC 22000 - Economics Of Agricultural Markets
• AGEC 29800 - Sophomore Seminar
• CHM 11100 - General Chemistry
• STAT 30100 - Elementary Statistical Methods
• Humanities or Social Science Selective - Credit Hours: 3.00
• Communication Marketing Selective - Credit Hours: 3.00
16 Credits

Spring 2nd Year

- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- CHM 11200 - General Chemistry

- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting

- Humanities or Social Science Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- AGEC 32700 - Principles Of Food And Agribusiness Marketing
- AGEC 42400 - Financial Management Of Agricultural Business

- AGEC 35200 - Quantitative Techniques For Firm Decision Making or
- AGEC 45100 - Applied Econometrics

- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- MGMT 45500 - Legal Background For Business I
- Economics selective - Credit Hours: 3.00
- Math/Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AGEC 42700 - Advanced Agribusiness Marketing
- AGEC 43100 - Advanced Agri-Sales And Marketing
- Electives - Credit Hours: 6.00

13 Credits
Spring 4th Year

- AGEC 43000 - Agricultural And Food Business Strategy
- Humanities or Social Science Selective (30000+level) - Credit Hours: 3.00
- Electives - Credit Hours: 7.00-8.00

13-14 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Certificate

Industrial Selling Certificate

The Certificate in Industrial Selling will be open to students in any major who are interested in industrial selling.

It has three required courses and a capstone course, totaling thirteen credit hours. Each certificate earner must also complete a day long industry sales experience with a B2B sales practitioner in their area of professional interest, and must participate in a sales or marketing oriented experience on campus. It is expected that additional courses (sales management, negotiations, etc.) will be developed over time as alternatives and complements to this set of initial courses.

Requirements for the Certificate (15 credits)
Required Courses (9 credits)

- AGEC 32700 - Principles Of Food And Agribusiness Marketing
- AGEC 33100 - Principles Of Selling In Agricultural Business
- CSR 31500 - Relationship Selling

Capstone Course (4 credits)

- AGEC 43100 - Advanced Agri-Sales And Marketing

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Minor

Farm Management Minor

Requirements for the Minor (18 credits)

Required Courses (13 credits)

- AGEC 31000 - Farm Organization
- AGEC 41100 - Farm Management
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or
- AGEC 20400 - Introduction To Resource Economics And Environmental Policy or
- ECON 25100 - Microeconomics
- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting

Selective Courses (5 credits)

- AGEC 22000 - Economics Of Agricultural Markets
- AGEC 30500 - Agricultural Prices
- AGEC 32100 - Principles Of Commodity Marketing
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGEC 41000 - Agricultural Policy
- AGEC 41200 - Farm Business Management Workshop
- AGEC 42100 - Advanced Commodity Marketing
- AGEC 42400 - Financial Management Of Agricultural Business
- AGEC 42500 - Estate Planning And Property Transfer
- AGEC 45600 - Federal Income Tax Law
- AGEC 45000 - International Agricultural Trade
- AGEC 52400 - Agricultural Finance

- AGEC 45500 - Agricultural Law or
- MGMT 45500 - Legal Background For Business I

One of the courses below can be used for the minor:
- MGMT 44301 - Management Of Human Resources
- MGMT 44362 - Leadership & Organizational Change
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 15200 - Business Principles For Organizational Leadership

Notes

- Department permission is not required to enroll in this minor.
- The required 18 credits are beyond the three-credit economics selective that is a part of core requirements for students in the College of Agriculture. For students from programs outside of the College of Agriculture, three credits of an economics selective are required in addition to the 18 credits noted above.

Disclaimer

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The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Food and Agribusiness Management Minor

Requirements for the Minor (18 credits)

Required Courses (9 credits)

- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or
- AGEC 20400 - Introduction To Resource Economics And Environmental Policy or
- ECON 25100 - Microeconomics

- AGEC 33000 - Management Methods For Agricultural Business or
- MGMT 20100 - Management Accounting I

- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting

Selective Courses (9 credits)

At least six of the nine selective credits must be in Agricultural Economics (AGEC) courses.
- AGEC 30500 - Agricultural Prices
- AGEC 32100 - Principles Of Commodity Marketing
- AGEC 32700 - Principles Of Food And Agribusiness Marketing
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGEC 33300 - Food Distribution - A Retailing Perspective
- AGEC 35200 - Quantitative Techniques For Firm Decision Making
- AGEC 41000 - Agricultural Policy
- AGEC 42100 - Advanced Commodity Marketing
- AGEC 42400 - Financial Management Of Agricultural Business
- AGEC 42700 - Advanced Agribusiness Marketing
- AGEC 43000 - Agricultural And Food Business Strategy
- AGEC 43100 - Advanced Agri-Sales And Marketing
- AGEC 45000 - International Agricultural Trade
- AGEC 45100 - Applied Econometrics
- AGEC 52400 - Agricultural Finance
- HORT 43500 - Principles Of Marketing And Management For Horticultural Businesses

- AGEC 45500 - Agricultural Law or
- MGMT 45500 - Legal Background For Business I

**Only one of the courses below can be used for this minor:**
- MGMT 44301 - Management Of Human Resources
- MGMT 44362 - Leadership & Organizational Change
- TLI 11200 - Foundations Of Organizational Leadership
- TLI 15200 - Business Principles For Organizational Leadership

**Notes**

- Department permission is not required to enroll in this minor.
- Any Management (MGMT) or Organizational Leadership and Supervision (OLS) course at the 20000 level or above may be used. Only one course from OLS 25200 and OLS 27400 may be used.

**Disclaimer**

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

**Global Food and Agriculture Systems Minor**

Provide students a course of study emphasizing the global development, policy, and sustainability of the food and agribusiness industry.

**Requirements for the Minor (18 credits)**

**Required Courses: (6 credits)**
- AGEC 22000 - Economics Of Agricultural Markets or
  ECON 34000 - Intermediate Microeconomic Theory

- AGEC 21700 - Economics or
  ECON 25200 - Macroeconomics

Selective Courses: (12 credits)

- AGEC 25000 - Economic Geography Of World Food And Resources
- AGEC 30500 - Agricultural Prices
- AGEC 32100 - Principles Of Commodity Marketing
- AGEC 33300 - Food Distribution - A Retailing Perspective
- AGEC 34000 - International Economic Development
- AGEC 40600 - Natural Resource And Environmental Economics
- AGEC 41000 - Agricultural Policy
- AGEC 42100 - Advanced Commodity Marketing
- AGEC 45000 - International Agricultural Trade
- AGEC 52600 - International Food And Agribusiness Marketing Strategy
- AGEC 53200 - World Food Problems

Notes

- Department Permission is not required to enroll in this minor.

Disclaimer

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Department of Agricultural Sciences Education and Communication (formerly YDAE)

Overview

Welcome to the Department of Agricultural Sciences Education and Communication (formerly YDAE) at Purdue University. The department's motto is "Empower, Educate, and Enhance."

These three very powerful words clearly and succinctly identify the purposes of the department. Empowering, Educating and Enhancing is accomplished by this interdisciplinary department with undergraduate programs in Agricultural Education and Agricultural Communication and a nationally recognized graduate program focused on learning and communication in the context of agriculture.

Department of Agricultural Sciences Education and Communication Website
Faculty

Contact Information

Agricultural Sciences Education and Communication
Purdue University
Agriculture Administration Building
615 West State Street
West Lafayette, IN 47907
Phone: (765) 494-8423
Email: undergrad@ydae.purdue.edu

The main office for the department is located in Room 214 of the AGAD Building.

Graduate Information

For Graduate Information please see Agricultural Sciences Education and Communication Graduate Program Information.

Baccalaureate

Agricultural Communication, BS

About the Program

Prepare for a profession that serves business and society by promoting awareness of food, agriculture, and science issues among rural and urban audiences. Purdue agricultural communication majors gain skills and experience in public relations, marketing, journalism, and new media through diverse coursework and competitive internships. Through the program's design, students have the advantage of excelling in communication, science, and agricultural courses—a combination future employers value. Though situated within a large university, the agricultural communication program offers a close-knit community in which students receive personal attention from faculty and staff in the College of Agriculture.

Agricultural Communication Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (110-111 credits)

Required Major Courses (24 credits)
- COM 20400 - Critical Perspectives On Communication
- COM 25000 - Mass Communication And Society
- COM 25200 - Writing For Mass Media
- COM 31100 - Copy Editing
- COM 31800 - Principles Of Persuasion
- YDAE 15200 - Agricultural Communication Seminar
- YDAE 46000 - Agricultural Publishing
- YDAE 48000 - Agricultural Communication Capstone Seminar

Other Departmental /Program Course Requirements (86-87 credits)

- AGEC 21700 - Economics
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12100 - Introduction To Youth Development And Agricultural Education Academic Programs
- AGR 20100 - Communicating Across Culture
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core)
- STAT 30100 - Elementary Statistical Methods
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Biological Science Selective - Credit Hours: 4.00
- Biological Science Selective - Credit Hours: 4.00
- Math/Science Selective - Credit Hours: 3.00
- Communication or AGCM Selective - Credit Hours: 8.00
- Communication or AGCM 30000+ Selective - Credit Hours: 3.00
- AGCM or Science Communication Selective - Credit Hours: 3.00
- Agricultural Selective - Credit Hours: 15.00
- Agricultural 30000+ Selective - Credit Hours: 6.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

Electives (9 - 10 credits)

University Core Requirements
• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Agricultural Communication Supplemental Information

Program Requirements

Fall 1st Year

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 12100 - Introduction To Youth Development And Agricultural Education Academic Programs
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing
• YDAE 15200 - Agricultural Communication Seminar ♦
• Humanities or Social Science Selective - Credit Hours: 3.00
• Biological Science Selective - Credit Hours: 4.00

14-15 Credits
Spring 1st Year

- AGEC 21700 - Economics
- COM 25000 - Mass Communication And Society
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Agricultural Selective - Credit Hours: 3.00
- Biological Science Selective - Credit Hours: 4.00

16 Credits

Fall 2nd Year

- AGR 20100 - Communicating Across Culture
- CHM 11100 - General Chemistry
- COM 20400 - Critical Perspectives On Communication
- MA 15800 - Precalculus- Functions And Trigonometry
- UCC Science, Technology, & Society Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CHM 11200 - General Chemistry
- COM 31800 - Principles Of Persuasion
- Agricultural Selective - Credit Hours: 3.00
- Communication or AGCM Selective - Credit Hours: 2.00
- Mathematics or Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00

15 Credits

Fall 3rd Year

- COM 25200 - Writing For Mass Media ♦
- STAT 30100 - Elementary Statistical Methods
- Agricultural Selective - Credit Hours: 6.00
- Communication or AGCM Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year
- YDAE 46000 - Agricultural Publishing
- Agricultural Selective (30000+ Level) - Credit Hours: 3.00
- Communication or AGCM Selective - Credit Hours: 3.00
- UCC Humanities Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- COM 31100 - Copy Editing
- YDAE 48000 - Agricultural Communication Capstone Seminar
- Agricultural Selective - Credit Hours: 3.00
- Communication or AGCM Selective (30000+ level) - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

15 Credits

Spring 4th Year

- AGCM or Science Communication Selective - Credit Hours: 3.00
- Agricultural Selective (30000+ level) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Electives - Credit Hours: 5.00 - 6.00

14-15 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer
The student is ultimately responsible for knowing and completing all degree requirements.

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**Agricultural Education, BS**

**About the Program**

Agricultural education students combine their interest in agriculture with their desire to work with people. Students are prepared to teach agricultural science, business, and related subjects in junior high, high school, or college settings. They also can pursue careers in agricultural service industries. There is a high demand for agricultural science and business teachers in Indiana and across the United States.

Agricultural Education Website

**Degree Requirements**

**128 Credits Required**

**Departmental/Program Major Courses (128 credits)**

**Required Major Courses (10 credits)**

- YDAE 31800 - Coordination Of Supervised Agricultural Experience Programs
- YDAE 31900 - Planning Agricultural Science And Business Programs
- YDAE 44000 - Methods Of Teaching Agricultural Education
- YDAE 44100 - Field Experience In Agricultural Education Programs

**Other Departmental /Program Course Requirements (117-118 credits)**

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12100 - Introduction To Youth Development And Agricultural Education Academic Programs
- AGEC 21700 - Economics
- AGRY 25500 - Soil Science
- AGRY 32000 - Genetics
- AGRY 37500 - Crop Production Systems
- ANSC 10200 - Introduction To Animal Agriculture (satisfies Science, Technology & Society Selective for core)
- ANSC 22100 - Principles Of Animal Nutrition
- ASM 20100 - Construction And Maintenance
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core)
- STAT 30100 - Elementary Statistical Methods
- EDCI 20500 - Exploring Teaching As A Career
- EDCI 27000 - Introduction To Educational Technology And Computing
- EDCI 28500 - Multiculturalism And Education
- EDCI 49800 - Supervised Teaching
- EDST 20010 - Educational Policies And Laws
- EDPS 23500 - Learning And Motivation
- EDPS 26500 - The Inclusive Classroom
- EDPS 32700 - Classroom Assessment
- EDPS 43010 - Secondary Creating And Managing Learning Environments
- ENTM 20600 - General Entomology
- ENTM 20700 - General Entomology Laboratory
- FNR 12500 - Environmental Science And Conservation
- FS 16100 - Science Of Food
- HORT 10100 - Fundamentals Of Horticulture
- HORT 20100 - Plant Propagation
- AGEC 31000 - Farm Organization
- AGEC 33000 - Management Methods For Agricultural Business
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literature for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills (satisfies Human Culture Behavioral/Social Science for core)
- ASM 1XXXX Welding Transfer Credits - Credit Hours: 3.00
- Biological Science Selective - Credit Hours: 4.00
- Biological Science Selective - Credit Hours: 4.00
- Technical Agriculture Selective - Credit Hours: 12.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- UCC Humanities Selective - Credit Hours: 3.00

Electives (0-1 credits)

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
Prerequisite Information:

For a complete listing of course selectives, visit the Provost's Website.

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Agricultural Education Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12100 - Introduction To Youth Development And Agricultural Education Academic Programs
- EDCI 27000 - Introduction To Educational Technology And Computing
- HORT 10100 - Fundamentals Of Horticulture
- ANSC 10200 - Introduction To Animal Agriculture
- Biological Science Selective - Credit Hours: 4.00

17 Credits

Spring 1st Year

- AGEc 21700 - Economics
- FNR 12500 - Environmental Science And Conservation
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Biological Science Selective - Credit Hours: 4.00
- Elective - Credit Hours: 0.00 - 1.00

13-15 Credits

Fall 2nd Year

- CHM 11100 - General Chemistry
- EDCI 20500 - Exploring Teaching As A Career
- EDCI 28500 - Multiculturalism And Education
- MA 15800 - Precalculus- Functions And Trigonometry
- ASM 1XXXX Welding (transfer credits) - Credit Hours: 3.00
- Technical Agriculture Selective - Credit Hours: 3.00

18 Credits

Spring 2nd Year

- CHM 11200 - General Chemistry
- EDPS 23500 - Learning And Motivation
- EDPS 26500 - The Inclusive Classroom
- ENTM 20600 - General Entomology
- ENTM 20700 - General Entomology Laboratory
- HORT 20100 - Plant Propagation
- AGEC 31000 - Farm Organization or
- AGEC 33000 - Management Methods For Agricultural Business

18 Credits

Fall 3rd Year

- AGRY 25500 - Soil Science
- AGRY 32000 - Genetics
- ASM 20100 - Construction And Maintenance
- EDPS 32700 - Classroom Assessment
- EDPS 43010 - Secondary Creating And Managing Learning Environments
- EDST 20010 - Educational Policies And Laws
- YDAE 31800 - Coordination Of Supervised Agricultural Experience Programs
- Technical Agriculture Selective - Credit Hours: 3.00

18 Credits

Spring 3rd Year
• AGRY 37500 - Crop Production Systems
• ANSC 22100 - Principles Of Animal Nutrition
• YDAE 31900 - Planning Agricultural Science And Business Programs
• YDAE 44100 - Field Experience In Agricultural Education Programs
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• UCC Humanities Selective - Credit Hours: 3.00

16 Credits

Fall 4th Year

• FS 16100 - Science Of Food
• STAT 30100 - Elementary Statistical Methods
• YDAE 44000 - Methods Of Teaching Agricultural Education
• Technical Agriculture Selective - Credit Hours: 6.00

15 Credits

Spring 4th Year

• EDCI 49800 - Supervised Teaching

12 Credits

Notes

2.0 GPA required for Bachelor of Science degree.
There is a 2.5 GPA requirement for stage-gates in this degree
Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.
For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer
The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

**Department of Agronomy**

**Overview**

The Department of Agronomy provides progressive and relevant undergraduate, graduate and extension education programs; conducts high impact fundamental and applied research at multiple scales to ensure that our science addresses immediate problems and anticipates future challenges; actively engages partners in the public and private sectors; and contributes to the development of the national and international agenda for research and education.

**Faculty**

**Website**

**Contact Information**

Department of Agronomy

Purdue University

Lilly Hall of Life Sciences
915 W. State Street
West Lafayette, IN 47907-2054
Phone: 765-494-4773

Email: agronomy@purdue.edu

The main office for the department is located in Room 2-414 of LILY Hall

**Graduate Information**

For Graduate Information please see Agronomy Graduate Program Information.

**Baccalaureate**

**Agronomy: Agronomic Business and Marketing Concentration, BS**

**About the Program**

Agronomic Business and Marketing prepares students to meet the high demand for professionals in technical sales and marketing or professional field agronomy with strength in business. Students have the flexibility to tailor plans of study to meet their individualized interests and needs by combining strengths in business, marketing, and agronomy. The unique advantage of this option is the primary strength generated in cropping system management amplified by strength in agri-business management.
Degree Requirements

120 Credits Required

Departmental/Program Major Courses (14 credits)

Required Major Courses (14 credits)

- AGRY 25500 - Soil Science
- AGRY 32000 - Genetics
- AGRY 36500 - Soil Fertility
- AGRY 39800 - Agronomy Seminar
- AGRY 49800 - Agronomy Senior Seminar
- AGRY 12500 - Environmental Science And Conservation or
- AGRY 28500 - World Crop Adaptation And Distribution

Other Departmental/Program Course Requirements (99-100 credits)

- AGE 20300 - Introductory Microeconomics For Food And Agribusiness
- AGE 33100 - Principles Of Selling In Agricultural Business
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- BTNY 30100 - Introductory Plant Pathology
- BTNY 30400 - Introductory Weed Science
- CHM 11100 - General Chemistry (satisfies Science Selective for core)
- CHM 11200 - General Chemistry (satisfies Science Selective for core)
- CHM 25700 - Organic Chemistry
- ENGL 42000 - Business Writing
- ENT 20600 - General Entomology
- ENT 20700 - General Entomology Laboratory
- STAT 30100 - Elementary Statistical Methods (satisfies Quantitative Reasoning Selective for core)

- AGE 31100 - Accounting For Farm Business Planning or
- MGMT 20010 - Business Accounting

- AGE 32700 - Principles Of Food And Agribusiness Marketing or
- MGMT 32300 - Principles Of Marketing

- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science

- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core) or
• MA 16010 - Applied Calculus I

• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Agronomy Crops Selective - Credit Hours: 3.00
• Agronomy Selective - Credit Hours: 3.00
• Ecology Selective - Credit Hours: 3.00
• Agricultural Economics Selective - Credit Hour: 6.00
• Agricultural Economics, Consumer Science and Retailing, Horticulture, or TLI Selective - Credit Hours: 6.00
• Additional Math or Science Selective - Credit Hours: 8.00
• Human Cultures Humanities Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (6-7 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Agronomy: Agronomic Business and Marketing Supplemental Information

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
Quantitative Reasoning
For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:
For current pre-requisites for courses, click here.

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- MA 15800 - Precalculus- Functions And Trigonometry or
- MA 16010 - Applied Calculus I
- Agronomy Crops Selective - Credit Hours: 3.00

14 Credits

Spring 1st Year

- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- CHM 11200 - General Chemistry
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Agronomy Selective - Credit Hours: 3.00

16-17 Credits

Fall 2nd Year

- AGRY 25500 - Soil Science ♦
- AGRY 39800 - Agronomy Seminar
- BTNY 30100 - Introductory Plant Pathology
- CHM 25700 - Organic Chemistry
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Elective - Credit Hours: 1.00

15 Credits

Spring 2nd Year

• AGRY 36500 - Soil Fertility
• STAT 30100 - Elementary Statistical Methods

• AGRY 12500 - Environmental Science And Conservation or
• AGRY 28500 - World Crop Adaptation And Distribution

• Agricultural Economics Selective - Credit Hours: 3.00
• Ecology Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

• BTNY 30400 - Introductory Weed Science

• AGR 31100 - Accounting For Farm Business Planning or
• MGMT 20010 - Business Accounting

• Additional Math or Science Selectives - Credit Hours: 4.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Elective - Credit Hours: 2.00

15 Credits

Spring 3rd Year

• AGR 33100 - Principles Of Selling In Agricultural Business
• AGRY 32000 - Genetics
• ENT 20600 - General Entomology
• ENT 20700 - General Entomology Laboratory

• Additional Math or Science Selectives - Credit Hours: 4.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits
Fall 4th Year

- AGRY 49800 - Agronomy Senior Seminar
- Agricultural Economics Selective - Credit Hours: 3.00
- Human Cultures Humanities Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

13 Credits

Spring 4th Year

- ENGL 42000 - Business Writing
- AGEC 32700 - Principles Of Food And Agribusiness Marketing or
- MGMT 32300 - Principles Of Marketing
- Agricultural Economics, Consumer Science and Retailing, Horticulture, or TLI Selective - Credit Hours: 6.00
- Electives - Credit Hours: 3.00-4.00

15-16 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Agronomy: Crop and Soil Management Concentration, BS
About the Program

**Crop and Soil Management** is for students interested in applying basic agronomic information to practical situations or problems. This is an ideal option for students who plan to become a professional crops/soils manager as an agronomist, farm manager, soil conservationist, or a related profession. Those interested in crop management frequently select cropping systems, crop physiology, plant breeding, and forage management courses.

Agronomy Website

Degree Requirements

**120 Credits Required**

Departmental/Program Major Courses (17 credits)

Required Major Courses (17 credits)

- AGRY 10500 - Crop Production
- AGRY 25500 - Soil Science
- AGRY 32000 - Genetics
- AGRY 36500 - Soil Fertility
- AGRY 39800 - Agronomy Seminar
- AGRY 49800 - Agronomy Senior Seminar

- AGRY 28500 - World Crop Adaptation And Distribution (satisfies Science, Technology, & Society for core) or
- AGRY 12500 - Environmental Science And Conservation

Other Departmental/Program Course Requirements (90-91 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry (satisfies Science Selective for core)
- CHM 11200 - General Chemistry (satisfies Science Selective for core)
- CHM 25700 - Organic Chemistry
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy Selective for core)

- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science

- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core) or
- MA 16010 - Applied Calculus I

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Agronomy Selective - Credit Hours: 3.00
- Ecology or Plant Ecology Selective - Credit Hours: 3.00
- Directed Selectives - Credit Hours: 27.00
- Math or Science Selectives - Credit Hours: 8.00
- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Human Cultures Humanities Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (12-13 credits)

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Agronomy: Crop and Soil Management Supplemental Information

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:
Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- AGRY 10500 - Crop Production
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- MA 15800 - Precalculus- Functions And Trigonometry or
- MA 16010 - Applied Calculus I

14 Credits

Spring 1st Year

- CHM 11200 - General Chemistry
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Economics Selective - Credit Hours: 3.00
- Electives - Credit Hours: 3.00

16-17 Credits

Fall 2nd Year

- AGRY 25500 - Soil Science ♦
- AGRY 39800 - Agronomy Seminar
- CHM 25700 - Organic Chemistry
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Directed Selective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00
15 Credits

Spring 2nd Year

- AGRY 36500 - Soil Fertility
- STAT 30100 - Elementary Statistical Methods
- AGRY 28500 - World Crop Adaptation And Distribution or
- AGRY 12500 - Environmental Science And Conservation
- Ecology or Plant Ecology Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- Directed Selectives - Credit Hours: 6.00
- Math or Science Selectives - Credit Hours: 4.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

15 Credits

Spring 3rd Year

- AGRY 32000 - Genetics
- Agronomy Selective - Credit Hours: 3.00
- Directed Selective - Credit Hours: 3.00
- Math or Science Selectives - Credit Hours: 4.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

16 Credits

Fall 4th Year

- AGRY 49800 - Agronomy Senior Seminar
- Directed Selectives - Credit Hours: 6.00
- UCC Humanities Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 4th Year
• Directed Selectives - Credit Hours: 9.00
• Electives - Credit Hours: 3.00 - 4.00

12-13 Credits

Notes

• 2.0 GPA required for Bachelor of Science degree.
• Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Agronomy: International Agronomy Concentration, BS

About the Program

International Agronomy is designed for students interested in the agronomic aspects of international agricultural development. The program prepares students for opportunities in world agriculture through careers with social action agencies, government and/or private industry. Students in this major build a strong foundation in science to go along with their study of international trade, culture, religion, language, food security, and agricultural development.

Agronomy Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (110-111 credits)
Required Major Courses (21 credits)

- AGRY 25500 - Soil Science
- AGRY 28500 - World Crop Adaptation And Distribution (satisfies Science, Technology, & Society for UCC core)
- AGRY 32000 - Genetics
- AGRY 33500 - Weather And Climate
- AGRY 35000 - Global Awareness
- AGRY 36500 - Soil Fertility
- AGRY 39800 - Agronomy Seminar
- AGRY 49800 - Agronomy Senior Seminar
- AGRY 59800 - Special Problems

Other Departmental/Program Course Requirements (89-90 credits)

- AGEC 34000 - International Economic Development
- AGEC 45000 - International Agricultural Trade
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry (satisfies Science Selective for core)
- CHM 11200 - General Chemistry (satisfies Science Selective for core)
- CHM 25700 - Organic Chemistry
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy Selective for core)
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core) or
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
  - Ecology or Plant Ecology Selective - Credit Hours: 3.00
  - Agronomy International Development Selective - Credit Hours: 3.00
  - Macroeconomics Selective - Credit Hours: 3.00
  - Conversation Language Selective - Credit Hours: 2.00
  - Directed Selectives - Credit Hours: 6.00
  - Agriculture or Science Selectives - Credit Hours: 6.00
  - Additional Math or Science Selectives - Credit Hours: 8.00
  - Microeconomics (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
  - Human Cultures Humanities Selective - Credit Hours: 3.00
- Foreign Language Selective - Credit Hours: 9.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

**Electives (9-10 credits)**

**College of Agriculture & University Level Requirements**

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

**Additional Degree Requirements**

Click here for Agronomy: International Agronomy Supplemental Information

**University Core Requirements**

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

**Prerequisite Information:**

For current pre-requisites for courses, click here.

**Program Requirements**

**Fall 1st Year**

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- MA 15800 - Precalculus- Functions And Trigonometry or
- MA 16010 - Applied Calculus I

14 Credits

Spring 1st Year

- AGRY 28500 - World Crop Adaptation And Distribution
- CHM 11200 - General Chemistry
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- Microeconomics Selective - Credit Hours: 3.00

16-17 Credits

Fall 2nd Year

- AGRY 25500 - Soil Science
- AGRY 39800 - Agronomy Seminar
- CHM 25700 - Organic Chemistry
- Macroeconomics Selective - Credit Hours: 3.00
- Foreign Language Selective - Credit Hours: 3.00

14 Credits

Spring 2nd Year

- AGRY 36500 - Soil Fertility
- STAT 30100 - Elementary Statistical Methods
- Ecology or Plant Ecology Selective - Credit Hours: 3.00
- Math or Science Selective - Credit Hours: 4.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits

Fall 3rd Year
- AGEC 45000 - International Agricultural Trade
- Directed Selective - Credit Hours: 3.00
- Foreign Language Selective - Credit Hours: 3.00
- Math or Science Selectives - Credit Hours: 4.00
- Human Cultures Humanities Selective- Credit Hours: 3.00

16 Credits

### Spring 3rd Year

- AGEC 34000 - International Economic Development
- AGRY 32000 - Genetics
- AGRY 33500 - Weather And Climate
- AGRY 35000 - Global Awareness
- Conversation Language Selective - Credit Hours: 2.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

15 Credits

### Fall 4th Year

- AGRY 49800 - Agronomy Senior Seminar
- AGRY 59800 - Special Problems
- Agronomy International Development Selective - Credit Hours: 3.00
- Foreign Language Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

13 Credits

### Spring 4th Year

- Directed Selectives - Credit Hours: 3.00
- Agriculture or Science Selective - Credit Hours: 6.00
- Electives - Credit Hours: 6.00-7.00

15-16 Credits

### Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.

### Foreign Language Courses

Foreign Language proficiency requirements vary by program.
Critical Course

The course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Applied Meteorology and Climatology, BS

About the Program

Many graduates pursue careers with the National Weather Service, the National Environmental Satellite Data and Information Service, the Environmental Research Laboratories, and the Department of Defense. Graduates also pursue careers with private meteorological or environmental consulting firms that provide weather information and apply atmospheric sciences to air pollution control, energy distribution, marketing, transportation, weather modification, and agriculture. Graduates also work for insurance and commodities industries that employ meteorologists who are educated in statistics, agriculture, and world climates.

Applied meteorologists apply weather and climate information to problems facing agriculture and commerce. Students acquire the skills and tools necessary to improve the health, safety, and productivity of today's world. Graduates work on many environmental problems such as air quality, renewable energy sources, climate change and the impacts of climate change.

The option involves extensive coursework in meteorology, physics, and mathematics, as well as first-hand experience in applying basic concepts to real world situations. Internship programs are available with private industry, the National Weather Service, or the National Oceanic and Atmospheric Administration. In addition there are regular opportunities to work in University laboratories and the State Climate Office.

Applied Meteorology and Climatology Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (110-111 credits)

Required Major Courses (32 credits)

- AGRY 28500 - World Crop Adaptation And Distribution (satisfies Science, Technology and Society for core)
- AGRY 33500 - Weather And Climate
- AGRY 33700 - Environmental Hydrology
- AGRY 39800 - Agronomy Seminar
- AGRY 43100 - Atmospheric Thermodynamics
- AGRY 43200 - Atmospheric Dynamics I
- AGRY 43300 - Atmospheric Dynamics II
- AGRY 44100 - Synoptic Laboratory I
- AGRY 44200 - Synoptic Laboratory II
- AGRY 44300 - Synoptic Laboratory III
- AGRY 49800 - Agronomy Senior Seminar
- AGRY 53500 - Boundary Layer Meteorology
- AGRY 53600 - Environmental Biophysics
- AGRY 54500 - Remote Sensing Of Land Resources

Other Departmental /Program Course Requirements (78-79 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry (satisfies Science Selective for core)
- CHM 11200 - General Chemistry (satisfies Science Selective for core)
- CS 15800 - C Programming
- EAPS 22700 - Introduction To Atmospheric Observation And Measurements
- EAPS 43400 - Weather Analysis And Forecasting
- EAPS 53200 - Atmospheric Physics I
- MA 16100 - Plane Analytic Geometry And Calculus I (satisfies Quantitative Reasoning Selective for core)
- MA 16200 - Plane Analytic Geometry And Calculus II
- MA 26100 - Multivariate Calculus
- MA 26200 - Linear Algebra And Differential Equations
- PHYS 17200 - Modern Mechanics
- PHYS 24100 - Electricity And Optics
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy Selective for core)

- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00
Electives (9 -10 credits)

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Applied Meteorology and Climatology Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- MA 16100 - Plane Analytic Geometry And Calculus I
- Elective - Credit Hours: 1.00

14 Credits
Spring 1st Year

- MA 16200 - Plane Analytic Geometry And Calculus II
- CHM 11200 - General Chemistry
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Elective - Credit Hours: 1.00 - 2.00

16-17 Credits

Fall 2nd Year

- AGRY 39800 - Agronomy Seminar
- CS 15800 - C Programming
- EAPS 22700 - Introduction To Atmospheric Observation And Measurements
- MA 26100 - Multivariate Calculus
- PHYS 17200 - Modern Mechanics
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

17 Credits

Spring 2nd Year

- AGRY 33500 - Weather And Climate
- AGRY 44100 - Synoptic Laboratory I
- MA 26200 - Linear Algebra And Differential Equations
- PHYS 24100 - Electricity And Optics
- Economics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00

17 Credits

Fall 3rd Year

- AGRY 43100 - Atmospheric Thermodynamics
- STAT 30100 - Elementary Statistical Methods
- UCC Humanities selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communication selective (20000+ level) - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- AGRY 28500 - World Crop Adaptation And Distribution
- AGRY 43200 - Atmospheric Dynamics I
- AGRY 44200 - Synoptic Laboratory II
- Humanities or Social Science Selective - Credit Hours: 3.00
- Electives - Credit Hours: 3.00

13 Credits

Fall 4th Year

- AGRY 43300 - Atmospheric Dynamics II
- AGRY 44300 - Synoptic Laboratory III
- AGRY 49800 - Agronomy Senior Seminar
- AGRY 53500 - Boundary Layer Meteorology
- AGRY 54500 - Remote Sensing Of Land Resources
- Elective - Credit Hours: 2.00

13 Credits

Spring 4th Year

- AGRY 33700 - Environmental Hydrology
- AGRY 53600 - Environmental Biophysics
- EAPS 43400 - Weather Analysis And Forecasting
- EAPS 53200 - Atmospheric Physics I
- Elective - Credit Hours: 2.00 - 3.00

14-15 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses
Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Crop Science, BS

About the Program

Crop science provides an education in the basic sciences, with applications in crop plant management and crop improvement. Opportunities are numerous and encompass a broad range in science, business, and education. Students are especially qualified for graduate study in plant nutrition, environmental science, crop physiology and ecology, biotechnology and plant genetics, and plant breeding.

Crop Science Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (33-35 credits)

Required Major Courses (27-29 credits)

- AGRY 10500 - Crop Production
- AGRY 25500 - Soil Science ♦
- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- AGRY 33500 - Weather And Climate
- AGRY 36500 - Soil Fertility
- AGRY 39800 - Agronomy Seminar
- AGRY 49800 - Agronomy Senior Seminar
- AGRY 12500 - Environmental Science And Conservation or
- AGRY 28500 - World Crop Adaptation And Distribution
- AGRY 51500 - Plant Mineral Nutrition or
  - BTNY 31600 - Plant Anatomy
- AGRY 52500 - Crop Physiology And Ecology or
  - HORT 30100 - Plant Physiology

Major Selectives (6 credits)

- Agronomy Selectives - Credit Hours: 6.00

Other Departmental /Program Course Requirements (77-78 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- BCHM 30700 - Biochemistry
- BCHM 30900 - Biochemistry Laboratory
- BIOL 11000 - Fundamentals Of Biology I
- BTNY 30100 - Introductory Plant Pathology
- BTNY 30400 - Introductory Weed Science
- CHM 11100 - General Chemistry (satisfies Science Selective for core)
- CHM 11200 - General Chemistry (satisfies Science Selective for core)
- CHM 25700 - Organic Chemistry
- CHM 25701 - Organic Chemistry Laboratory
- ENTM 20600 - General Entomology
- ENTM 20700 - General Entomology Laboratory
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy Selective for core)

- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core)
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Business Selective - Credit Hours: 3.00
- Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (9-10 credits)

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
  
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Crop Science Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- AGRY 10500 - Crop Production
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

17-18 Credits

Spring 1st Year

- CHM 11200 - General Chemistry
- MA 16020 - Applied Calculus II
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science

16 Credits

Fall 2nd Year

- AGRY 25500 - Soil Science ♦
- AGRY 39800 - Agronomy Seminar
- CHM 25700 - Organic Chemistry
- CHM 25701 - Organic Chemistry Laboratory
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

15 Credits

Spring 2nd Year

- AGRY 36500 - Soil Fertility
- STAT 30100 - Elementary Statistical Methods
- AGRY 12500 - Environmental Science And Conservation or
- AGRY 28500 - World Crop Adaptation And Distribution

Elective - Credit Hours: 3.00
Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- BTNY 30100 - Introductory Plant Pathology
- PHYS 22000 - General Physics
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

17 Credits

Spring 3rd Year

- AGRY 33500 - Weather And Climate
- PHYS 22100 - General Physics
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- UCC Humanities Selective - Credit Hours: 3.00

13 Credits

Fall 4th Year

- AGRY 49800 - Agronomy Senior Seminar
- BCHM 30700 - Biochemistry
- BCHM 30900 - Biochemistry Laboratory
- ENTM 20600 - General Entomology
- ENTM 20700 - General Entomology Laboratory

- AGRY 51500 - Plant Mineral Nutrition or
- BTNY 31600 - Plant Anatomy

- Elective - Credit Hours: 3.00

14-15 Credits

Spring 4th Year

- BTNY 30400 - Introductory Weed Science

- AGRY 52500 - Crop Physiology And Ecology or
- HORT 30100 - Plant Physiology
• Business Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Elective - Credit Hours: 0.00 - 1.00

12-14 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Plant Genetics, Breeding, and Biotechnology, BS

About the Program

Plant genetics, breeding, and biotechnology students are interested in agricultural biotechnology, genetic engineering, and research in genetic mechanisms that control crop growth and development. Students prepare for many research opportunities in industry and acquire the necessary background for graduate studies. Students also learn the fundamentals of genetics and practical plant breeding as well as the latest developments in genetic engineering, environmentally sound crop production practices, development of varieties appropriate for the agriculture of developing countries, and strategies for developing plant lines adapted to environmental stresses. Opportunities exist for training both in laboratory and field practices important to modern genetics research. A professional internship involving practical aspects of the option is required.

Plant Genetics, Breeding, and Biotechnology Website
Degree Requirements

120 Credits Required

Departmental/Program Major Courses (21-22 credits)

Required Major Courses (21-22 credits)

- AGRY 25500 - Soil Science ♦
- AGRY 28500 - World Crop Adaptation And Distribution
- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- AGRY 39800 - Agronomy Seminar
- AGRY 48000 - Plant Genetics
- AGRY 49800 - Agronomy Senior Seminar
- AGRY 52000 - Principles And Methods Of Plant Breeding

- AGRY 52500 - Crop Physiology And Ecology ♦
- HORT 30100 - Plant Physiology

Other Departmental/Program Course Requirements (89-91 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- AGR 12500 - Introduction To Plant Science
- BCHM 30700 - Biochemistry
- BCHM 30900 - Biochemistry Laboratory
- BIOL 22100 - Introduction To Microbiology
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11500 - General Chemistry (satisfies Science Selective for core)
- CHM 11600 - General Chemistry (satisfies Science Selective for core)
- CHM 25700 - Organic Chemistry
- CHM 25701 - Organic Chemistry Laboratory
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- MA 16020 - Applied Calculus II
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy Selective for core)

- BIOL 11100 - Fundamentals Of Biology II ♦
- BTNY 11000 - Introduction To Plant Science

- BIOL 23100 - Biology III: Cell Structure And Function ♦
- BTNY 42000 - Plant Cellular And Developmental Biology

- BIOL 41500 - Introduction To Molecular Biology ♦
- BTNY 35000 - Biotechnology In Agriculture
• PHYS 17200 - Modern Mechanics or
  PHYS 22000 - General Physics

• PHYS 22100 - General Physics or
  PHYS 24100 - Electricity And Optics

• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
  ENGL 10800 - Accelerated First-Year Composition or
  HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
  COM 21700 - Science Writing And Presentation (satisfies Oral Communication for core) or
  EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
  UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
  Humanities or Social Science Selective - Credit Hours: 3.00
  Humanities or Social Science Selective - Credit Hours: 3.00
  Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
  Directed Selective - Credit Hours: 12.00
  Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (7-10 credits)

• Elective (credits required depend on Math, Physics, & Physiology course choices) - Credit Hours: 7.00 to 10.00

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.
Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Requirements

Click here for Plant Genetics, Plant Breeding & Biotechnology Supplemental Information

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- AGR 12500 - Introduction To Plant Science
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11500 - General Chemistry
- MA 16010 - Applied Calculus I

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

16-17 Credits

Spring 1st Year

- CHM 11600 - General Chemistry
- MA 16020 - Applied Calculus II

- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science

- Elective - Credit Hours: 3.00

14 Credits
Fall 2nd Year

- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- AGRY 39800 - Agronomy Seminar
- PHYS 17200 - Modern Mechanics or
- PHYS 22000 - General Physics
- Economics Selective - Credit Hours: 3.00
- Directed Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- AGRY 28500 - World Crop Adaptation And Distribution
- CHM 25700 - Organic Chemistry
- CHM 25701 - Organic Chemistry Laboratory
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- PHYS 22100 - General Physics or
- PHYS 24100 - Electricity And Optics

Elective - Credit Hours: 1.00

15-16 Credits

Fall 3rd Year

- AGRY 25500 - Soil Science♦
- BCHM 30700 - Biochemistry
- BCHM 30900 - Biochemistry Laboratory
- BIOL 23100 - Biology III: Cell Structure And Function or
- BTNY 42000 - Plant Cellular And Developmental Biology
- UCC Humanities Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

15 Credits

Spring 3rd Year
• BIOL 22100 - Introduction To Microbiology
• Directed Selective - Credit Hours: 6.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits

Fall 4th Year

• AGRY 48000 - Plant Genetics
• AGRY 49800 - Agronomy Senior Seminar
• AGRY 52000 - Principles And Methods Of Plant Breeding
• STAT 30100 - Elementary Statistical Methods
• BIOL 41500 - Introduction To Molecular Biology or
• BTNY 35000 - Biotechnology In Agriculture

13 Credits

Spring 4th Year

• AGRY 52500 - Crop Physiology And Ecology or
• HORT 30100 - Plant Physiology
• Directed Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Electives - Credit Hours: 1.00-4.00

13-17 Credits

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer
The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

**Soil and Water Sciences, BS**

**About the Program**

The Soil and Water Sciences option provides a strong science education, while preparing students to apply this knowledge in many technical phases of soil, water resources and environmental management. Opportunities are numerous and encompass a broad range in science, management, and education with diverse applications addressing agricultural water use, food security, soil and water quality and secure water supplies. Students are especially qualified for graduate study in hydrology, water resources, soil chemistry, soil physics, soil microbiology, environmental science, soil mineralogy and genesis, and ecology.

Soil and Water Sciences Website

**Degree Requirements**

**120 Credits Required**

**Departmental/Program Major Courses (29-30 credits)**

**Required Major Courses (29-30 credits)**

- AGRY 12500 - Environmental Science And Conservation
- AGRY 25500 - Soil Science
- AGRY 33500 - Weather And Climate
- AGRY 33700 - Environmental Hydrology
- AGRY 36500 - Soil Fertility
- AGRY 39800 - Agronomy Seminar
- AGRY 46500 - Soil Physical Properties
- AGRY 49800 - Agronomy Senior Seminar
- AGRY 56500 - Soils And Landscapes

- AGRY 34900 - Soil Ecology or
- AGRY 38500 - Environmental Soil Chemistry

- AGRY 45000 - Soil Conservation and Water Management or
- AGRY 58500 - Soils And Land Use

**Other Departmental /Program Course Requirements (79-80 credits)**

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
• CHM 11100 - General Chemistry (satisfies Science Selective for core)
• CHM 11200 - General Chemistry (satisfies Science Selective for core)
• CHM 25700 - Organic Chemistry
• CHM 25701 - Organic Chemistry Laboratory
• EAPS 11100 - Physical Geology
• MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
• MA 16020 - Applied Calculus II
• PHYS 22000 - General Physics
• PHYS 22100 - General Physics
• STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy Selective for core)

• BIOL 11100 - Fundamentals Of Biology II or
• BTNY 11000 - Introduction To Plant Science

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• Crop or Plant Science Selective - Credit Hours: 3.00
• Ecology Selective - Credit Hours: 3.00
• Engineering or Science Selective - Credit Hours: 3.00
• Genetics or Crop Physiology and Ecology, or Biochemistry selective - Credit Hours: 3.00
• Agricultural Economics, Economics, Management or Technology Leadership & Innovation Selective - Credit Hours: 3.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (10-12 credits)

• Elective - Credit Hours: 10.00-12.00

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture
University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Requirements

Click here for Soil & Water Sciences Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11300 - Introduction To Agronomy Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year

- CHM 11200 - General Chemistry
- MA 16020 - Applied Calculus II

- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
- Economics Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

- AGRY 25500 - Soil Science ♦
- AGRY 12500 - Environmental Science And Conservation
- AGRY 39800 - Agronomy Seminar
- CHM 25700 - Organic Chemistry
- CHM 25701 - Organic Chemistry Laboratory
- Crop or Plant Science Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- AGRY 36500 - Soil Fertility
- PHYS 22000 - General Physics

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Ecology Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

15 Credits

Fall 3rd Year

- EAPS 11100 - Physical Geology
- PHYS 22100 - General Physics

- AGRY 34900 - Soil Ecology or
- AGRY 38500 - Environmental Soil Chemistry

- UCC Humanities Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

15-16 Credits

Spring 3rd Year
- AGRY 33700 - Environmental Hydrology
- STAT 30100 - Elementary Statistical Methods
- Genetics or Crop Physiology and Ecology, or Biochemistry Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AGRY 46500 - Soil Physical Properties
- AGRY 49800 - Agronomy Senior Seminar
- AGRY 56500 - Soils And Landscapes
- AGRY 45000 - Soil Conservation and Water Management or
- AGRY 58500 - Soils And Land Use
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

13 Credits

Spring 4th Year

- AGRY 33500 - Weather And Climate
- Engineering or Science Selective - Credit Hours: 3.00
- Agricultural Economics, Economics, Management or Technology Leadership & Innovation Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Electives - Credit Hours: 3.00-5.00

15-17 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course
The course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Minor

Crop Science Minor

Requirements for the Minor (18 credits)

Required Courses (6 credits)

- AGRY 25500 - Soil Science
- AGRY 10500 - Crop Production or
- AGRY 37500 - Crop Production Systems

Selective Courses (12 credits)

- AGRY 10500 - Crop Production *
- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- AGRY 33500 - Weather And Climate
- AGRY 36500 - Soil Fertility
- AGRY 37500 - Crop Production Systems *
- AGRY 48000 - Plant Genetics
- AGRY 50500 - Forage Management
- AGRY 51500 - Plant Mineral Nutrition
- AGRY 52000 - Principles And Methods Of Plant Breeding
- BTNY 30100 - Introductory Plant Pathology
- BTNY 30400 - Introductory Weed Science
- BTNY 35000 - Biotechnology In Agriculture
- ENTM 20600 - General Entomology
- ENTM 20700 - General Entomology Laboratory
  - AGRY 52500 - Crop Physiology And Ecology or
  - HORT 30100 - Plant Physiology

Notes

- Departmental permission is not required to enroll in this minor.
Students majoring in the Department of Agronomy cannot obtain a Crop Science minor.

* If not used above as a required course.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Soil Science Minor

Requirements for the Minor (18 credits)

Required Courses (6 credits)

- AGRY 25500 - Soil Science
- AGRY 36500 - Soil Fertility

Selective Courses (12 credits)

- AGRY 12500 - Environmental Science And Conservation
- AGRY 33500 - Weather And Climate
- AGRY 33700 - Environmental Hydrology
- AGRY 33800 - Environmental Hydrology Laboratory
- AGRY 34900 - Soil Ecology
- AGRY 35500 - Soil Morphology And Geography
- AGRY 45000 - Soil Conservation and Water Management
- AGRY 46500 - Soil Physical Properties
- AGRY 54000 - Soil Chemistry
- AGRY 54400 - Environmental Organic Chemistry
- AGRY 54500 - Remote Sensing Of Land Resources
- AGRY 55500 - Soil And Plant Analysis
- AGRY 56000 - Soil Physics
- AGRY 56500 - Soils And Landscapes
- AGRY 58000 - Soil Microbiology
- AGRY 58200 - Environmental Fate Of Pesticides
- AGRY 58500 - Soils And Land Use

Notes

- Departmental permission is not required to enroll in this minor.
- Students majoring in the Department of Agronomy cannot obtain a Soil Science minor.

Disclaimer
The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

**Department of Animal Sciences**

**Overview**

The Purdue University Department of Animal Sciences promotes leadership and inspiration to educate students, enabling them to anticipate and effectively respond to challenges facing the global animal industries. The Animal Sciences faculty conducts relevant scientific research and facilitates technology transfer for efficient and sustainable production of high quality animal products, optimizing animal well-being, enhancing the human diet, and advancing sound environmental practices.

The vision of the Department of Animal Sciences is simple. We desire to be the "place to go" for the citizens of Indiana and beyond for knowledge in animal sciences. This includes students, commodity groups, industry partners, government agencies, consumers, and many others. Our shared goals are to:

- provide students with a rigorous and relevant education, preparing them for a lifetime of learning;
- achieve scientific preeminence in selected areas, and develop teams to identify and solve real world problems; and
- meet the needs of our diverse clientele making the best use of emerging technologies.

The Animal Sciences faculty has expertise in the disciplines of growth and development, nutrition, breeding and genetics, physiology, management, and animal well-being and behavior. In addition, scientists in the USDA Livestock Behavior Unit associated with Purdue are adjunct faculty members.

Concentrations include:

- Animal Agribusiness
- Behavior/Well-Being
- Biosciences
- Pre-Veterinary Medicine
- Production
- Products

**Faculty**

**Website**

**Contact Information**

Department of Animal Sciences
Purdue University
Creighton Hall of Animal Sciences
270 S. Russell Street
West Lafayette, IN 47907-2041
765-494-4843
The main office for the department is located in 1014 Creighton Hall of Animal Sciences.

**Baccalaureate**

**Animal Sciences: Animal Agribusiness Concentration, BS**

**About the Program**

This Department of Animal Sciences option is best suited for those interested in business aspects of the animal industry and gaining knowledge in accounting, sales and marketing, and business management. Graduates are high in demand in sales and service areas of animal health products; feed, production, equipment firms; sales companies; and animal representatives for banks and lending organizations, insurance companies, marketing, advertising, and public relations agencies. You may be well suited for animal agribusiness if you enjoy meeting people, have a good oral communication skills as well as a proficiency in writing. Experience with raising and managing of animals is essential since you will be expected to interact and relate to managers, veterinarians, businessmen, and owners of animal enterprises. An interest in economics, marketing, and business management is important.

Animal Sciences (multiple concentrations) Website

**Degree Requirements**

**120 Credits Required**

**Departmental/Program Major Courses (107-108 credits)**

**Required Major Courses (12 credits)**

- ANSC 10200 - Introduction To Animal Agriculture (UCC STS Selective)
- ANSC 18100 - Orientation To Animal Sciences
- ANSC 22100 - Principles Of Animal Nutrition
- ANSC 23000 - Physiology Of Domestic Animals
- ANSC 48100 - Contemporary Issues in Animal Sciences

**ANSC Restricted Selectives (21 credits, 18 credits have to be 30000 or higher)**

(see ANSC Undergraduate Student Handbook)

- Animal Genetics Selective - Credit Hours: 4.00
- Animal Nutrition Selective - Credit Hours: 3.00
- Animal Physiology Selective - Credit Hours: 3.00
- Animal Production/Management Selective - Credit Hours: 3.00
- Animal Products Selective - Credit Hours: 3.00
- Animal Sciences Selectives - Credit Hours: 5.00
Other Departmental /Program Course Requirements (74-75 credits)

(see ANSC Undergraduate Student Handbook)

- **AGEC 20200** - Spreadsheet Use In Agricultural Business
- **AGEC 20300** - Introductory Microeconomics For Food And Agribusiness (satisfies Human Culture Behavioral/Social Science for core)
- **AGEC 33000** - Management Methods For Agricultural Business
- **AGR 10100** - Introduction To The College Of Agriculture And Purdue University
- **AGR 11400** - Introduction to Animal Sciences Academic Programs
- **AGRY 32000** - Genetics
- **BIOL 11000** - Fundamentals Of Biology I
- **BIOL 11100** - Fundamentals Of Biology II
- **CHM 11100** - General Chemistry (satisfies Science #1 for core)
- **CHM 11200** - General Chemistry (satisfies Science #2 for core)
- **MA 16010** - Applied Calculus I (satisfies Quantitative Reasoning for core)
- **CHM 25700** - Organic Chemistry
- **STAT 30100** - Elementary Statistical Methods (satisfies Information Literacy for core)

- **MGMT 20000** - Introductory Accounting or
- **MGMT 20010** - Business Accounting
- **ENGL 10600** - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- **ENGL 10800** - Accelerated First-Year Composition or
- **HONR 19903** - Interdisciplinary Approaches In Writing

- **COM 11400** - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- **COM 21700** - Science Writing And Presentation or
- **EDPS 31500** - Collaborative Leadership: Interpersonal Skills

- Agricultural Economics, Economics, or Management Selective - Credit Hours: 12.00
- Economics Selective - Credit Hours: 3.00
- **UCC Humanities Selective** (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

**Electives (12 - 13 credits)**

**University Core Requirements**

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Animal Sciences: Animal Agribusiness Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11400 - Introduction to Animal Sciences Academic Programs
- ANSC 10200 - Introduction To Animal Agriculture
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year

- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- ANSC 18100 - Orientation To Animal Sciences
- BIOL 11100 - Fundamentals Of Biology II
- CHM 11200 - General Chemistry
- MA 16010 - Applied Calculus I
- COM 11400 - Fundamentals Of Speech Communication or
  COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

17 Credits

Fall 2nd Year

- AGE 20200 - Spreadsheet Use In Agricultural Business
- ANSC 22100 - Principles Of Animal Nutrition ∆
- MGMT 20000 - Introductory Accounting or
  MGMT 20010 - Business Accounting
- Economics Selective - Credit Hours: 3.00
- UCC Humanities Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- AGE 33000 - Management Methods For Agricultural Business
- AGRY 32000 - Genetics
- ANSC 23000 - Physiology Of Domestic Animals
- CHM 25700 - Organic Chemistry

14 Credits

Fall 3rd Year

- STAT 30100 - Elementary Statistical Methods
- Agricultural Economics, Economics, or Management Selective - Credit Hours: 3.00
- Animal Nutrition Selective - Credit Hours: 3.00
- Animal Physiology Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- Agricultural Economics, Economics, or Management Selective - Credit Hours: 3.00
- Animal Genetics Selective - Credit Hours: 4.00
• Animal Products Selective - Credit Hours: 3.00
• Animal Sciences Selective - Credit Hours: 2.00
• Humanities or Social Science Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

• ANSC 48100 - Contemporary Issues in Animal Sciences
• Agricultural Economics, Economics, or Management Selective - Credit Hours: 3.00
• Animal Production/Management Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Electives - Credit Hours: 5.00

15 Credits

Spring 4th Year

• Animal Sciences Selective - Credit Hours: 3.00
• Agricultural Economics, Economics, or Management Selective - Credit Hours: 3.00
• Electives - Credit Hours: 7.00 - 8.00

13-14 Credits

Notes

2.0 GPA required for Bachelor of Science degree.
ANSC courses must be at 2.0 or higher GPA to earn a BS in Animal Sciences
Consultation with an advisor may result in an altered plan customized for an individual student.
Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.
For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.
Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Animal Sciences: Behavior/Well-Being Concentration, BS

About the Program

Students desiring a balance of animal production, behavioral sciences, and well-being are best served by this option in the department of Animal Sciences. Careers available as managers of animal production units (e.g., beef cow-calf or feed lot manager, flock supervisor, swine manager or horse trainer or breeder). Limited career opportunities may be available as an animal trainer, zoo environmental enhancement specialist, companion animal consultant, breed association animal well-being specialist, and pet safety education specialist for a humane society. Students interested in advanced studies can become animal behavior consultants or scientists at universities.

Animal Sciences (multiple concentrations) Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (110-111 credits)

Required Major Courses (15 credits)

- ANSC 10200 - Introduction To Animal Agriculture (UCC STS Selective)
- ANSC 18100 - Orientation To Animal Sciences
- ANSC 22100 - Principles Of Animal Nutrition
- ANSC 23000 - Physiology Of Domestic Animals
- ANSC 40400 - Animal Welfare
- ANSC 48100 - Contemporary Issues in Animal Sciences

ANSC Restricted Selectives (21 credits, 18 credits have to be 30000 or higher)

(see ANSC Undergraduate Student Handbook)

- Animal Genetics Selective - Credit Hours: 4.00
- Animal Nutrition Selective - Credit Hours: 3.00
- Animal Physiology Selective - Credit Hours: 3.00
- Animal Production/Management selective - Credit Hours: 3.00
- Animal Products Selective - Credit Hours: 3.00
- Animal Sciences Selectives - Credit Hours: 5.00
Other Departmental /Program Course Requirements (74-75 credits)

(see ANSC Undergraduate Student Handbook)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11400 - Introduction to Animal Sciences Academic Programs
- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- BCHM 30700 - Biochemistry
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- CHM 11500 - General Chemistry (satisfies Science #1 for core)
- CHM 11600 - General Chemistry (satisfies Science #2 for core)
- CHM 25500 - Organic Chemistry
- CHM 25501 - Organic Chemistry Laboratory
- CHM 25600 - Organic Chemistry
- CHM 25601 - Organic Chemistry Laboratory
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Behavior/Well-being Selective - Credit Hours: 9.00
- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level)- Credit Hours: 3.00

Electives (9 - 10 credits)

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Animal Sciences: Behavior/Well Being Supplemental Information

Program Requirements

Fall 1st Year

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11400 - Introduction to Animal Sciences Academic Programs
• ANSC 10200 - Introduction To Animal Agriculture
• BIOL 11000 - Fundamentals Of Biology I
• CHM 11500 - General Chemistry
• MA 16010 - Applied Calculus I

15 Credits

Spring 1st Year

• ANSC 18100 - Orientation To Animal Sciences
• BIOL 11100 - Fundamentals Of Biology II
• CHM 11600 - General Chemistry
• MA 16020 - Applied Calculus II

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

15-16 Credits

Fall 2nd Year

• ANSC 22100 - Principles Of Animal Nutrition
• CHM 25500 - Organic Chemistry
• CHM 25501 - Organic Chemistry Laboratory
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills
• Animal Sciences Selective - Credit Hours: 2.00
• Economics Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

• AGRY 32000 - Genetics
• AGRY 32100 - Genetics Laboratory
• ANSC 23000 - Physiology Of Domestic Animals
• CHM 25600 - Organic Chemistry
• CHM 25601 - Organic Chemistry Laboratory
• UCC Humanities Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

• ANSC 40400 - Animal Welfare
• BCHM 30700 - Biochemistry
• STAT 30100 - Elementary Statistical Methods
• Animal Physiology Selective - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

15 Credits

Spring 3rd Year

• Animal Genetics Selective - Credit Hours: 4.00
• Animal Nutrition Selective - Credit Hours: 3.00
• Behavior/Well-being Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
Elective - Credit Hours: 2.00

15 Credits

Fall 4th Year

- ANSC 48100 - Contemporary Issues in Animal Sciences
- Animal Production/Management Selective - Credit Hours: 3.00
- Animal Sciences Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Behavior/Well-being Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

15 Credits

Spring 4th Year

- Behavior/Well-being Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Animal Products Selective - Credit Hours: 3.00
- Electives - Credit Hours: 5.00 - 6.00

14-15 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

2.0 GPA required for Animal Science Courses

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.
Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Animal Sciences: Biosciences Concentration, BS

About the Program

The Department of Animal Sciences offers this specialization that is intended for students seeking careers in research or technical services related to animal nutrition, growth and development, animal genetics, reproduction, animal well-being, and management. Those in this specialization should have a strong interest in and curiosity in discovery and have enjoyed their high school biology, chemistry, mathematics, and physics courses. Students who aspire to careers in research and teaching in colleges and universities or in agribusinesses should enroll in this option. It can also be used as an excellent preparation for professional careers such as human medical doctors, veterinarians, dentists, and employment in the nutrition, genomics, and pharmaceutical industries. Graduates continuing for the M.S. or Ph.D. degrees in animal sciences qualify for numerous research, teaching, or extension positions in industry, government, universities, and colleges.

Animal Sciences (multiple concentrations) Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (111-112 credits)

Required Major Courses (12 credits)

- **ANSC 10200 - Introduction To Animal Agriculture** (UCC STS Selective)
- **ANSC 18100 - Orientation To Animal Sciences**
- **ANSC 22100 - Principles Of Animal Nutrition**
- **ANSC 23000 - Physiology Of Domestic Animals**
- **ANSC 48100 - Contemporary Issues in Animal Sciences**

ANSC Restricted Selectives (21 credits, 18 credits must be 30000 or higher)

(see ANSC Undergraduate Student Handbook)

- Animal Genetics Selective - Credit Hours: 4.00
- Animal Nutrition Selective - Credit Hours: 3.00
- Animal Physiology Selective - Credit Hours: 3.00
- Animal Production/Management selective - Credit Hours: 3.00
- Animal Products Selective - Credit Hours: 3.00
- Animal Sciences Selectives - Credit Hours: 5.00
Other Departmental /Program Course Requirements (78-79 credits)

(see ANSC Undergraduate Student Handbook)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11400 - Introduction to Animal Sciences Academic Programs
- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- BCHM 30700 - Biochemistry
- BCHM 30900 - Biochemistry Laboratory
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- CHM 11500 - General Chemistry (satisfies Science #1 for core)
- CHM 11600 - General Chemistry (satisfies Science #2 for core)
- CHM 25500 - Organic Chemistry
- CHM 25501 - Organic Chemistry Laboratory
- CHM 25600 - Organic Chemistry
- CHM 25601 - Organic Chemistry Laboratory
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Science Selective - Credit hours: 12.00
- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (8-9 credits)

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Animal Sciences: Biosciences Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11400 - Introduction to Animal Sciences Academic Programs
- ANSC 10200 - Introduction To Animal Agriculture
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11500 - General Chemistry
- MA 16010 - Applied Calculus I

15 Credits

Spring 1st Year

- ANSC 18100 - Orientation To Animal Sciences
- BIOL 11100 - Fundamentals Of Biology II
- CHM 11600 - General Chemistry
- MA 16020 - Applied Calculus II
- HONR 19903 - Interdisciplinary Approaches In Writing
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or

15-16 Credits

Fall 2nd Year

• ANSC 22100 - Principles Of Animal Nutrition ♦
• CHM 25500 - Organic Chemistry
• CHM 25501 - Organic Chemistry Laboratory
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Animal Sciences Selective - Credit Hours: 2.00
• Economics Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

• AGRY 32000 - Genetics
• AGRY 32100 - Genetics Laboratory
• ANSC 23000 - Physiology Of Domestic Animals
• CHM 25600 - Organic Chemistry
• CHM 25601 - Organic Chemistry Laboratory
• UCC Humanities Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

• BCHM 30700 - Biochemistry
• BCHM 30900 - Biochemistry Laboratory
• STAT 30100 - Elementary Statistical Methods
• Animal Physiology Selective - Credit Hours: 3.00
• Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

• Animal Genetics Selective - Credit Hours: 4.00
• Animal Nutrition Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

15 Credits

Fall 4th Year

- ANSC 48100 - Contemporary Issues in Animal Sciences
- Animal Production/Management Selective - Credit Hours: 3.00
- Animal Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

15 Credits

Spring 4th Year

- Animal Products Selective - Credit Hours: 3.00
- Science Selectives - Credit Hours: 6.00
- Electives - Credit Hours: 4.00 - 5.00

13-14 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Minimum 2.0 GPA required in Animal Science courses

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.
Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Animal Sciences: Pre-Veterinary Medicine Concentration, BS

About the Program

The Department of Animal Sciences offers this concentration that is intended for students seeking careers in veterinary medicine, research, or technical services related to animal nutrition, growth and development, animal genetics, reproduction, animal well-being, and management. Those in this concentration should have a strong interest in and curiosity in discovery and have enjoyed their high school biology, chemistry, mathematics, and physics courses. This concentration can be used as excellent preparation for professional careers such as human medical doctors, veterinarians, dentists, and employment in the nutrition, genomics, and pharmaceutical industries.

Animal Sciences Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (33 credits)

Required Major Courses (12 credits)

- ANSC 10200 - Introduction To Animal Agriculture (satisfies Science, Technology, & Society for core)
- ANSC 18100 - Orientation To Animal Sciences
- ANSC 22100 - Principles Of Animal Nutrition
- ANSC 23000 - Physiology Of Domestic Animals
- ANSC 48100 - Contemporary Issues in Animal Sciences

ANSC Restricted Selectives (21 credits)

18 credits must be 30000 or higher - see ANSC Undergraduate Student Handbook

- Animal Genetics Selective - Credit Hours: 4.00
- Animal Nutrition Selective - Credit Hours: 3.00
- Animal Physiology Selective - Credit Hours: 3.00
- Animal Production/Management selective - Credit Hours: 3.00
- Animal Products Selective - Credit Hours: 3.00
- Animal Sciences Selectives - Credit Hours: 5.00

Other Departmental /Program Course Requirements (83-84 credits)
AGR 10100 - Introduction To The College Of Agriculture And Purdue University
AGR 11400 - Introduction to Animal Sciences Academic Programs
AGRY 32000 - Genetics
AGRY 32100 - Genetics Laboratory
BCHM 30700 - Biochemistry
BIOL 11000 - Fundamentals Of Biology I
BIOL 11100 - Fundamentals Of Biology II
BIOL 22100 - Introduction To Microbiology
BIOL 23100 - Biology III: Cell Structure And Function
BIOL 23200 - Laboratory In Biology III: Cell Structure And Function
CHM 11500 - General Chemistry (satisfies Science #1 for core)
CHM 11600 - General Chemistry (satisfies Science #2 for core)
CHM 25500 - Organic Chemistry
CHM 25501 - Organic Chemistry Laboratory
CHM 25600 - Organic Chemistry
PHYS 22000 - General Physics or
PHYS 23300 - Physics For Life Sciences I
PHYS 22100 - General Physics or
PHYS 23400 - Physics For Life Sciences II
ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
ENGL 10800 - Accelerated First-Year Composition or
HONR 19903 - Interdisciplinary Approaches In Writing
COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
COM 21700 - Science Writing And Presentation or
EDPS 31500 - Collaborative Leadership: Interpersonal Skills
Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
Humanities or Social Science Selective - Credit Hours: 3.00
Humanities or Social Science Selective - Credit Hours: 3.00
Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (3-4 credits)

College of Agriculture & University Level Requirements
• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Animal Sciences: Pre-Veterinary Medicine Supplemental Information

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Program Requirements

Fall 1st Year

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11400 - Introduction to Animal Sciences Academic Programs
• ANSC 10200 - Introduction To Animal Agriculture
• BIOL 11000 - Fundamentals Of Biology I
• CHM 11500 - General Chemistry
• MA 16010 - Applied Calculus I

15 Credits

Spring 1st Year

• ANSC 18100 - Orientation To Animal Sciences
• BIOL 11100 - Fundamentals Of Biology II
- CHM 11600 - General Chemistry
- MA 16020 - Applied Calculus II
- VM 10200 - Careers In Veterinary Medicine
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 2nd Year

- ANSC 22100 - Principles Of Animal Nutrition ♦
- BIOL 23100 - Biology III: Cell Structure And Function
- BIOL 23200 - Laboratory In Biology III: Cell Structure And Function
- CHM 25500 - Organic Chemistry
- CHM 25501 - Organic Chemistry Laboratory
- HONR 19903 - Interdisciplinary Approaches In Writing
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or

15-16 Credits

Spring 2nd Year

- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- ANSC 23000 - Physiology Of Domestic Animals
- CHM 25600 - Organic Chemistry
- CHM 25601 - Organic Chemistry Laboratory
- Animal Sciences Selective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- BCHM 30700 - Biochemistry
- STAT 30100 - Elementary Statistical Methods
- PHYS 22000 - General Physics or
- PHYS 23300 - Physics For Life Sciences I
- Animal Physiology Selective - Credit Hours: 3.00
- Human Cultures Humanities Selective - Credit Hours: 3.00
16 Credits

Spring 3rd Year

- BIOL 22100 - Introduction To Microbiology
- PHYS 22100 - General Physics or
  PHYS 23400 - Physics For Life Sciences II
- Humanities or Social Science Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00

14 Credits

Fall 4th Year

- ANSC 48100 - Contemporary Issues in Animal Sciences
- Animal Genetics Selective - Credit Hours: 4.00
- Animal Production/Management Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00-4.00

14-15 Credits

Spring 4th Year

- Animal Nutrition Selective - Credit Hours: 3.00
- Animal Products Selective - Credit Hours: 3.00
- Animal Sciences Selective - Credit Hours: 2.00
- Humanities or Social Science Selective (30000+ level): Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level): Credit Hours: 3.00

14 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- 2.0 GPA required in Animal Science courses
- Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish
Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Animal Sciences: Production Concentration, BS

About the Program

Opportunities associated with this Department of Animal Sciences option include the leadership and management of any enterprise that deals with the daily production and care of animals. This could include food animal species of beef or dairy cattle, chickens, ducks, fish, sheep, swine, or turkeys or many companion animal species including cats, dogs, horses, and many exotic or zoo animals. This option is the best balance of science, business, and the enterprise management subjects designed to prepare someone to manage live animals. Enterprises might be owned by the graduate's family, the graduate, or any agribusiness company. Graduates of this option often serve as technical support staff for input companies, as field or services representatives in various commodity organizations, livestock sale companies, or procurement officers for meat processing companies. You may be well suited for an animal production management career if you enjoy working with and supervising people, have good oral communication and problem-solving skills as well as competencies working with animals directly. Experience with the raising and managing of animals is essential since you will be expected to interact and relate to managers, veterinarians, business representatives, and owners of animal enterprises.

Animal Sciences (multiple concentrations) Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (107-108 credits)

Required Major Courses (12 credits)

- ANSC 10200 - Introduction To Animal Agriculture (satisfies STS Selective for core)
- ANSC 18100 - Orientation To Animal Sciences
- ANSC 22100 - Principles Of Animal Nutrition ♦
- ANSC 23000 - Physiology Of Domestic Animals
- ANSC 48100 - Contemporary Issues in Animal Sciences

ANSC Restricted Selectives (21 credits, 18 credits must be from 30000 or higher)
Animal Genetics Selective - Credit Hours: 4.00
Animal Nutrition Selective - Credit Hours: 3.00
Animal Physiology Selective - Credit Hours: 3.00
Animal Production/Management selective - Credit Hours: 3.00
Animal Products Selective - Credit Hours: 3.00
Animal Sciences Selectives - Credit Hours: 5.00

Other Departmental /Program Course Requirements (74-75 credits)

AGR 10100 - Introduction To The College Of Agriculture And Purdue University
AGR 11400 - Introduction to Animal Sciences Academic Programs
AGRY 32000 - Genetics
BCHM 30700 - Biochemistry
BIOL 11000 - Fundamentals Of Biology I
BIOL 11100 - Fundamentals Of Biology II
BIOL 22100 - Introduction To Microbiology
CHM 11100 - General Chemistry (satisfies Science #1 for core)
CHM 11200 - General Chemistry (satisfies Science #2 for core)
CHM 25700 - Organic Chemistry
MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
STAT 30100 - Elementary Statistical Methods

ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
ENGL 10800 - Accelerated First-Year Composition or
HONR 19903 - Interdisciplinary Approaches In Writing

COM 11400 - Fundamentals Of Speech Communication or
COM 21700 - Science Writing And Presentation or
EDPS 31500 - Collaborative Leadership: Interpersonal Skills

Financial Management Selective - Credit Hours: 3.00
Enterprise Management Selective - Credit Hours: 3.00
Enterprise Management Selective - Credit Hours: 3.00
Production/Management Selective (Non-ANSC) - Credit Hours: 3.00
Production/Management Selective (Non-ANSC) - Credit Hours: 3.00
Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
Humanities or Social Science Selective - Credit Hours: 3.00
Humanities or Social Science Selective - Credit Hours: 3.00
Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (12 - 13 credits)
University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Animal Sciences: Production Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11400 - Introduction to Animal Sciences Academic Programs
- ANSC 10200 - Introduction To Animal Agriculture
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits
Spring 1st Year

- ANSC 18100 - Orientation To Animal Sciences
- BIOL 11100 - Fundamentals Of Biology II
- CHM 11200 - General Chemistry
- MA 16010 - Applied Calculus I
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Elective - Credit Hours: 2.00

16 Credits

Fall 2nd Year

- ANSC 22100 - Principles Of Animal Nutrition ♦
- CHM 25700 - Organic Chemistry
- Economics Selective - Credit Hours: 3.00
- UCC Humanities Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- AGRY 32000 - Genetics
- ANSC 23000 - Physiology Of Domestic Animals
- BCHM 30700 - Biochemistry
- Animal Sciences Selective - Credit Hours: 3.00
- Financial Management Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- BIOL 22100 - Introduction To Microbiology
- STAT 30100 - Elementary Statistical Methods
- Animal Nutrition Selective - Credit Hours: 3.00
- Animal Physiology Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00

16 Credits
Spring 3rd Year

- Animal Genetics Selective - Credit Hours: 4.00
- Animal Products Selective - Credit Hours: 3.00
- Enterprise Management Selective - Credit Hours: 3.00
- Production/Management Selective (Non-ANSC) - Credit Hours: 3.00

13 Credits

Fall 4th Year

- ANSC 48100 - Contemporary Issues in Animal Sciences
- Animal Production/Management Selective - Credit Hours: 3.00
- Animal Sciences Selective - Credit Hours: 2.00
- Enterprise Management Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Production/Management Selective (Non-ANSC) - Credit Hours: 3.00
- Electives - Credit Hours: 7.00 - 8.00

13-14 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Minimum 2.0 GPA required in Animal Science courses

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course
The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Animal Sciences: Products Concentration, BS

About the Program

This Department of Animal Sciences option is meant to prepare students who are interested in the live animal production of quality animal products combined with the ever-growing further processing industry of safe, healthful food. Opportunities include product-development managers; meat scientists; live-animal procurement managers; and sales positions in milk, egg, or meat processing industries. Many graduates become graders and inspectors at the farm or manufacturing level for milk, meat and eggs; commercial and seedstock animal production evaluators and breeders; or university or industry researchers and product developers. Graduates continuing for the M.S. or Ph.D. degree in growth and development, food science, agricultural economics, or muscle biology qualify for numerous research, teaching, or extension positions in industry, government, universities, and colleges. You should enjoy the challenge of applying basic information to the solution of practical problems as well as the challenges of working in the consumer-driven food industries.

Animal Sciences (multiple concentrations) Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (99-101 credits)

Required Major Courses (12 credits)

- ANSC 10200 - Introduction To Animal Agriculture (satisfies STS Selective for core)
- ANSC 18100 - Orientation To Animal Sciences
- ANSC 22100 - Principles Of Animal Nutrition ♦
- ANSC 23000 - Physiology Of Domestic Animals
- ANSC 48100 - Contemporary Issues in Animal Sciences

ANSC Restricted Selectives (21 credits, 18 credits must be 30000 or higher)

(see ANSC Undergraduate Student Handbook)

- Animal Genetics Selective - Credit Hours: 4.00
- Animal Nutrition Selective - Credit Hours: 3.00
- Animal Physiology Selective - Credit Hours: 3.00
• Animal Production/Management selective - Credit Hours: 3.00
• Animal Products Selective - Credit Hours: 3.00
• Animal Sciences Selectives - Credit Hours: 5.00

Other Departmental /Program Course Requirements (66-68 credits)

(see ANSC Undergraduate Student Handbook)

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11400 - Introduction to Animal Sciences Academic Programs
• AGRY 32000 - Genetics
• BCHM 30700 - Biochemistry
• BCHM 30900 - Biochemistry Laboratory
• BIOL 11000 - Fundamentals Of Biology I
• BIOL 11100 - Fundamentals Of Biology II
• BIOL 22100 - Introduction To Microbiology
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• CHM 25700 - Organic Chemistry
• MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
• STAT 30100 - Elementary Statistical Methods
• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing
• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills
• Business Management Selective - Credit Hours: 3.00
• Food Science Selective - Credit Hours: 3.00 - 4.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (19 - 21 credits)

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Animal Sciences: Products Supplemental Information

Program Requirements

Fall 1st Year

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11400 - Introduction to Animal Sciences Academic Programs
• ANSC 10200 - Introduction To Animal Agriculture
• BIOL 11000 - Fundamentals Of Biology I
• CHM 11100 - General Chemistry
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year

• ANSC 18100 - Orientation To Animal Sciences
• BIOL 11100 - Fundamentals Of Biology II
- CHM 11200 - General Chemistry
- MA 16010 - Applied Calculus I
- COM 11400 - Fundamentals Of Speech Communication or
  COM 21700 - Science Writing And Presentation or
  EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Elective - Credit Hours: 2.00

16 Credits

Fall 2nd Year

- ANSC 22100 - Principles Of Animal Nutrition ♦
- CHM 25700 - Organic Chemistry
- Business Management Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- AGRY 32000 - Genetics
- ANSC 23000 - Physiology Of Domestic Animals
- BCHM 30700 - Biochemistry
- BCHM 30900 - Biochemistry Laboratory
- Animal Sciences Selective - Credit Hours: 3.00

14 Credits

Fall 3rd Year

- BIOL 22100 - Introduction To Microbiology
- STAT 30100 - Elementary Statistical Methods
- Animal Nutrition Selective - Credit Hours: 3.00
- Animal Products Selective - Credit Hours: 3.00
- UCC Humanities Selective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- Animal Genetics Selective - Credit Hours: 4.00
- Animal Physiology Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
• Electives - Credit Hours: 5.00

15 Credits

Fall 4th Year

• ANSC 48100 - Contemporary Issues in Animal Sciences
• Animal Production/Management Selective - Credit Hours: 3.00
• Food Science Selective - Credit Hours: 3.00 - 4.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Electives - Credit Hours: 4.00

14-15 Credits

Spring 4th Year

• Animal Sciences Selective - Credit Hours: 2.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Electives - Credit Hours: 8.00 - 10.00

13-15 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Minimum 2.0 GPA in ANSC courses required to earn degree

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

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**Minor**

**Animal Science Minor**

Requirements for the Minor (18 credits)

Complete one course in at least two of the four areas:

A. Nutrition

- ANSC 22100 - Principles Of Animal Nutrition

B. Physiology

- ANSC 23000 - Physiology Of Domestic Animals
- BIOL 20300 - Human Anatomy And Physiology
- BIOL 20400 - Human Anatomy And Physiology

C. Genetics

- ANSC 31100 - Animal Breeding
- ANSC 51100 - Population Genetics
- ANSC 51400 - Animal Biotechnology
- BIOL 41500 - Introduction To Molecular Biology

D. Products

- ANSC 30100 - Animal Growth, Development, And Evaluation
- ANSC 35100 - Meat Science

E. Electives

- Remainder of 18 credits may be completed from other courses listed above, or from Animal Sciences (ANSC) courses that are numbered 30100 or higher.
- Not more than four total credits from ANSC 37000, ANSC 37100, ANSC 37200, ANSC 47000, ANSC 47100, and ANSC 47200 may be used.
- Only one of the physiology courses listed above may be used to satisfy the minor.

**Notes**
• Departmental permission is not required to enroll in this minor.
• Students must achieve a minimum 2.00 grade point average in graded ANSC courses to meet minimum requirements for the Animal Sciences academic minor.

Disclaimer

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Department of Biochemistry

Overview

The Department of Biochemistry is a vibrant research community with widespread, multidisciplinary collaborations. We offer both undergraduate and graduate programs with emphasis on research excellence in broad areas of science. The field of biochemistry has historically focused on molecular dissection of biological molecules and cellular pathways. Our current faculty build upon this classical approach, using cutting-edge approaches ranging from genome-wide transcriptional analyses, state-of-the-art mass spectroscopy, and x-ray crystallography in a variety of model systems including bacteria, fungi, plants and fruit flies. These approaches allow our researchers to link real world problems such as energy production and human disease prevention to defects in basic molecular processes, tackling the most pressing issues in society.

Faculty

Department of Biochemistry Website

Contact Information

Department of Biochemistry
Purdue University

Biochemistry Building
175 South University Street
West Lafayette, IN 47907-2063
Phone: 765-494-1600

Email: biochem-boilers@purdue.edu

Website

The main office for the department is located in Room 120 of the BCHM Building.

Graduate Information

For Graduate Information please see Biochemistry Graduate Program Information.
Biochemistry, BS

About the Program

Biochemistry, the chemistry of living things, addresses the basic materials and processes of life itself. Biochemists investigate the chemical nature of such fundamental processes as the regulation of gene expression, the hormonal control of cell proliferation and differentiation. Knowledge of the molecular underpinnings of biological materials allows us to understand life processes and solve basic biological problems.

Students in the Department of Biochemistry, historically situated in the College of Agriculture, enjoy close mentoring by faculty through smaller class sizes and academic advising. Another strength of our program is that we strongly promote hands-on research and critical thinking skills. All students in the department participate in undergraduate research supervised by a faculty member.

There is also an opportunity to complete a five-year dual degree with biological engineering following acceptance into the College of Engineering.

How to apply to Biochemistry in the College of Agriculture

Biochemistry Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (113-114 credits)

Required Major Courses (25 credits)

- BCHM 10000 - Introduction To Biochemistry
- BCHM 22100 - Analytical Biochemistry
- BCHM 29000 - Experimental Design Seminar
- BCHM 32200 - Analytical Biochemistry II
- BCHM 36100 - Molecules
- BCHM 39000 - Professional Development Seminar
- BCHM 46200 - Metabolism
- BCHM 46300 - Macromolecular Machines
- BCHM 46500 - Biochemistry Of Life Processes
- BCHM 49000 - Undergraduate Seminar
- BCHM 49800 - Research In Biochemistry

Other Departmental/Program Course Requirements (88-89 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11500 - Introduction To Biochemistry
• AGRY 32000 - Genetics
• AGRY 32100 - Genetics Laboratory
• BIOL 11000 - Fundamentals Of Biology I
• BIOL 11100 - Fundamentals Of Biology II
• BIOL 23100 - Biology III: Cell Structure And Function
• BIOL 23200 - Laboratory In Biology III: Cell Structure And Function
• CHM 11500 - General Chemistry (satisfies Science #1 for Core)
• CHM 11600 - General Chemistry (satisfies Science #2 for core)
• CHM 25500 - Organic Chemistry
• CHM 25501 - Organic Chemistry Laboratory
• CHM 25600 - Organic Chemistry
• CHM 25601 - Organic Chemistry Laboratory
• CHM 37200 - Physical Chemistry
• MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
• MA 16020 - Applied Calculus II
• PHYS 22000 - General Physics
• PHYS 22100 - General Physics
• STAT 30100 - Elementary Statistical Methods
• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing
• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

Electives (6 - 7 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture
University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Biochemistry Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11500 - Introduction To Biochemistry Academic Programs
- BCHM 10000 - Introduction To Biochemistry
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11500 - General Chemistry
- MA 16010 - Applied Calculus I
- Humanities or Social Science Selective - Credit Hours: 3.00

17 Credits

Spring 1st Year

- BIOL 11100 - Fundamentals Of Biology II
- CHM 11600 - General Chemistry
- MA 16020 - Applied Calculus II

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
14-15 Credits

Fall 2nd Year

- BCHM 22100 - Analytical Biochemistry
- BIOL 23100 - Biology III: Cell Structure And Function
- BIOL 23200 - Laboratory In Biology III: Cell Structure And Function
- CHM 25500 - Organic Chemistry
- CHM 25501 - Organic Chemistry Laboratory
- STAT 30100 - Elementary Statistical Methods

15 Credits

Spring 2nd Year

- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- BCHM 29000 - Experimental Design Seminar
- BCHM 36100 - Molecules
- CHM 25600 - Organic Chemistry
- CHM 25601 - Organic Chemistry Laboratory
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 3rd Year

- BCHM 32200 - Analytical Biochemistry II
- BCHM 39000 - Professional Development Seminar
- BCHM 46200 - Metabolism
- BCHM 49800 - Research In Biochemistry
- PHYS 22000 - General Physics
- UCC Humanities Selective - Credit Hours: 3.00

14 Credits

Spring 3rd Year

- BCHM 49800 - Research In Biochemistry
- PHYS 22100 - General Physics
- Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00 - 4.00

14-15 Credits

Fall 4th Year

- BCHM 46300 - Macromolecular Machines
- BCHM 49800 - Research In Biochemistry
- Economics Selective - Credit Hours: 3.00
- Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00

16 Credits

Spring 4th Year

- BCHM 46500 - Biochemistry Of Life Processes
- BCHM 49000 - Undergraduate Seminar
- CHM 37200 - Physical Chemistry
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.
Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

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Biochemistry: Pre-Med Concentration, BS

About the Program

Biochemistry, the chemistry of living things, addresses the basic materials and processes of life itself. Biochemists investigate the chemical nature of such fundamental processes as the regulation of gene expression, the hormonal control of cell proliferation and differentiation. Knowledge of the molecular underpinnings of biological materials allows us to understand life processes and solve basic biological problems.

Students in the Department of Biochemistry, historically situated in the College of Agriculture, enjoy close mentoring by faculty through smaller class sizes and academic advising. Another strength of our program is that we strongly promote hands-on research and critical thinking skills. All students in the department participate in undergraduate research supervised by a faculty member.

There is also an opportunity to complete a five-year dual degree with biological engineering following acceptance into the College of Engineering.

How to apply to Biochemistry in the College of Agriculture

Biochemistry Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (113-116 credits)

Required Major Courses (25 credits)

- BCHM 10000 - Introduction To Biochemistry
- BCHM 22100 - Analytical Biochemistry
- BCHM 29000 - Experimental Design Seminar
- BCHM 32200 - Analytical Biochemistry II
- BCHM 36100 - Molecules
- BCHM 39000 - Professional Development Seminar
- BCHM 46200 - Metabolism
- BCHM 46300 - Macromolecular Machines
- BCHM 46500 - Biochemistry Of Life Processes
- BCHM 49000 - Undergraduate Seminar
- BCHM 49800 - Research In Biochemistry
Other Departmental/Program Course Requirements (88-91 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11500 - Introduction To Biochemistry Academic Programs
- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- BIOL 23100 - Biology III: Cell Structure And Function
- BIOL 23200 - Laboratory In Biology III: Cell Structure And Function
- BIOL 39600 - Premedical Planning Seminar
- CHM 11500 - General Chemistry (satisfies Science #1 for Core)
- CHM 11600 - General Chemistry (satisfies Science #2 for core)
- CHM 25500 - Organic Chemistry
- CHM 25501 - Organic Chemistry Laboratory
- CHM 25600 - Organic Chemistry
- CHM 25601 - Organic Chemistry Laboratory
- CHM 37200 - Physical Chemistry
- MA 16010 - Applied Calculus I
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- PSY 12000 - Elementary Psychology
- SOC 10000 - Introductory Sociology
- STAT 30100 - Elementary Statistical Methods

- BIOL 30100 - Human Design: Anatomy And Physiology or
- BIOL 20300 - Human Anatomy And Physiology

- BIOL 30200 - Human Design: Anatomy And Physiology or
- BIOL 20400 - Human Anatomy And Physiology

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (4 - 7 credits)
College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Biochemistry: Pre-Med Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11500 - Introduction To Biochemistry Academic Programs
- BCHM 10000 - Introduction To Biochemistry
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11500 - General Chemistry
- MA 16010 - Applied Calculus I

14 Credits

Spring 1st Year
- BIOL 11100 - Fundamentals Of Biology II
- CHM 11600 - General Chemistry
- MA 16020 - Applied Calculus II

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- Humanities or Social Science Selective - Credit Hours: 3.00

17-18 Credits

Fall 2nd Year

- BCHM 22100 - Analytical Biochemistry
- BIOL 23100 - Biology III: Cell Structure And Function
- BIOL 23200 - Laboratory In Biology III: Cell Structure And Function
- CHM 25500 - Organic Chemistry
- CHM 25501 - Organic Chemistry Laboratory
- STAT 30100 - Elementary Statistical Methods

15 Credits

Spring 2nd Year

- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- BCHM 29000 - Experimental Design Seminar
- BCHM 36100 - Molecules
- CHM 25600 - Organic Chemistry
- CHM 25601 - Organic Chemistry Laboratory
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 3rd Year

- BCHM 32200 - Analytical Biochemistry II
- BCHM 39000 - Professional Development Seminar
- BCHM 46200 - Metabolism
- BCHM 49800 - Research In Biochemistry
- PHYS 22000 - General Physics
- SOC 10000 - Introductory Sociology
14 Credits

Spring 3rd Year

- BCHM 49800 - Research In Biochemistry
- BIOL 39600 - Premedical Planning Seminar
- PHYS 22100 - General Physics
- PSY 12000 - Elementary Psychology
- UCC Humanities Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00 - 4.00

14-15 Credits

Fall 4th Year

- BCHM 46300 - Macromolecular Machines
- BCHM 49800 - Research In Biochemistry
- BIOL 30100 - Human Design: Anatomy And Physiology or
- BIOL 20300 - Human Anatomy And Physiology
- Economics Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

13-14 Credits

Spring 4th Year

- BCHM 46500 - Biochemistry Of Life Processes
- BCHM 49000 - Undergraduate Seminar
- CHM 37200 - Physical Chemistry
- BIOL 30200 - Human Design: Anatomy And Physiology or
- BIOL 20400 - Human Anatomy And Physiology
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 1.00 - 3.00

14-17 Credits

Notes

2.0 GPA required for Bachelor of Science degree.
Consultation with an advisor may result in an altered plan customized for an individual student.
Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

**Foreign Language Courses**

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

**Critical Course**

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

**Disclaimer**

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

**Biochemistry: Pre-Vet Concentration, BS**

**About the Program**

Biochemistry, the chemistry of living things, addresses the basic materials and processes of life itself. Biochemists investigate the chemical nature of such fundamental processes as the regulation of gene expression, the hormonal control of cell proliferation and differentiation. Knowledge of the molecular underpinnings of biological materials allows us to understand life processes and solve basic biological problems.

Students in the Department of Biochemistry, historically situated in the College of Agriculture, enjoy close mentoring by faculty through smaller class sizes and academic advising. Another strength of our program is that we strongly promote hands-on research and critical thinking skills. All students in the department participate in undergraduate research supervised by a faculty member.

There is also an opportunity to complete a five-year dual degree with biological engineering following acceptance into the College of Engineering.

How to apply to Biochemistry in the College of Agriculture

Biochemistry Website

**Degree Requirements**

**120 Credits Required**

Departmental/Program Major Courses (115-116 credits)
Required Major Courses (25 credits)

- BCHM 10000 - Introduction To Biochemistry
- BCHM 22100 - Analytical Biochemistry
- BCHM 29000 - Experimental Design Seminar
- BCHM 32200 - Analytical Biochemistry II
- BCHM 36100 - Molecules
- BCHM 39000 - Professional Development Seminar
- BCHM 46200 - Metabolism
- BCHM 46300 - Macromolecular Machines
- BCHM 46500 - Biochemistry Of Life Processes
- BCHM 49000 - Undergraduate Seminar
- BCHM 49800 - Research In Biochemistry

Other Departmental /Program Course Requirements (90-91 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11500 - Introduction To Biochemistry Academic Programs
- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- ANSC 22100 - Principles Of Animal Nutrition
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- BIOL 22100 - Introduction To Microbiology
- BIOL 23100 - Biology III: Cell Structure And Function
- BIOL 23200 - Laboratory In Biology III: Cell Structure And Function
- CHM 11500 - General Chemistry (satisfies Science #1 for Core)
- CHM 11600 - General Chemistry (satisfies Science #2 for core)
- CHM 25500 - Organic Chemistry
- CHM 25501 - Organic Chemistry Laboratory
- CHM 25600 - Organic Chemistry
- CHM 25601 - Organic Chemistry Laboratory
- CHM 37200 - Physical Chemistry
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- PHYS 22000 - General Physics
- PHYS 22100 - General Physics
- STAT 30100 - Elementary Statistical Methods
- VM 10200 - Careers In Veterinary Medicine
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (4-5 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Degree Requirements

Click here for Biochemistry: Pre-Vet Supplemental Information

Program Requirements

Fall 1st Year
• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11500 - Introduction To Biochemistry Academic Programs
• BCHM 10000 - Introduction To Biochemistry
• BIOL 11000 - Fundamentals Of Biology I
• CHM 11500 - General Chemistry
• MA 16010 - Applied Calculus I

14 Credits

Spring 1st Year

• BIOL 11100 - Fundamentals Of Biology II
• CHM 11600 - General Chemistry
• MA 16020 - Applied Calculus II
• VM 10200 - Careers In Veterinary Medicine
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• Elective - Credit Hours: 1.00

16-17 Credits

Fall 2nd Year

• BCHM 22100 - Analytical Biochemistry
• BIOL 23100 - Biology III: Cell Structure And Function
• BIOL 23200 - Laboratory In Biology III: Cell Structure And Function
• CHM 25500 - Organic Chemistry♦
• CHM 25501 - Organic Chemistry Laboratory
• STAT 30100 - Elementary Statistical Methods

15 Credits

Spring 2nd Year

• AGRY 32000 - Genetics
• AGRY 32100 - Genetics Laboratory
• BCHM 29000 - Experimental Design Seminar
• BCHM 36100 - Molecules
• CHM 25600 - Organic Chemistry
• CHM 25601 - Organic Chemistry Laboratory
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 3rd Year

- BCHM 32200 - Analytical Biochemistry II
- BCHM 39000 - Professional Development Seminar
- BCHM 46200 - Metabolism
- BCHM 49800 - Research In Biochemistry
- PHYS 22000 - General Physics
- UCC Humanities Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

16 Credits

Spring 3rd Year

- ANSC 22100 - Principles Of Animal Nutrition
- BCHM 49800 - Research In Biochemistry
- PHYS 22100 - General Physics
- Humanities or Social Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
- Elective - Credit Hours: 1.00 - 2.00

15-16 Credits

Fall 4th Year

- BCHM 46300 - Macromolecular Machines
- BCHM 49800 - Research In Biochemistry
- BIOL 22100 - Introduction To Microbiology
- Economics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00

14 Credits

Spring 4th Year

- BCHM 46500 - Biochemistry Of Life Processes
- BCHM 49000 - Undergraduate Seminar
- CHM 37200 - Physical Chemistry
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Minor

Biochemistry Minor

Requirements for the Minor (18-19 credits)

A. Required Courses (11-12 credits)

- BCHM 10000 - Introduction To Biochemistry (or any Science, Technology, and Society (STS) course that is on the approved list.)
- CHM 25600 - Organic Chemistry or
- CHM 26200 - Organic Chemistry or
- CHM 26605 - Organic Chemistry or
- MCMP 20500 - Organic Chemistry II
- BCHM 36100 - Molecules or
- BCHM 56100 - General Biochemistry I
• BCHM 46200 - Metabolism or
• BCHM 56200 - General Biochemistry II

B. Selective Courses (7 credits)

• BCHM 29000 - Experimental Design Seminar
• BCHM 32200 - Analytical Biochemistry II
• BCHM 46300 - Macromolecular Machines
• BCHM 46500 - Biochemistry Of Life Processes
• BCHM 49000 - Undergraduate Seminar
• BCHM 49800 - Research In Biochemistry

• BCHM 22100 - Analytical Biochemistry or
• CHM 32100 - Analytical Chemistry I

• Any other BCHM course at the 40000-level or higher

Notes

• Departmental permission is not required for this minor.
• Departmental permission is required to register for the following courses: BCHM 29000, BCHM 36100, BCHM 46200, BCHM 46300, BCHM 46500, BCHM 49000 and BCHM 49800

Disclaimer

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Department of Botany and Plant Pathology

Overview

Welcome to the Department of Botany and Plant Pathology at Purdue University.

Research, teaching and extension have been an integral part of the Department of Botany and Plant Pathology since 1887. Today's department includes 23 faculty who are advancing and teaching the disciplines of Plant Biology, Plant Pathology and Weed Science.

Explore our web site and see the opportunities our department offers. Learn how you can do more to protect the environment, apply genetic knowledge to improve plants, manage natural resources, control weeds, or diagnose plant diseases with a degree from Purdue's Botany and Plant Pathology department.

Faculty

Department of Botany and Plant Pathology Website
Contact Information

Department of Botany and Plant Pathology
Purdue University
Lilly Hall of Life Sciences
915 West State Street
West Lafayette, IN 47907-2054
Phone: 765.494.4614
E-mail: botany@purdue.edu

The main office for the department is located in Room 1-446 of LILY Hall.

Graduate Information

For Graduate Information please see Botany and Plant Pathology Graduate Program Information.

Baccalaureate

Plant Science, BS

About the Program

This major is designed for students who are interested in the biology of plants: how they grow, develop and evolve; the interactions of plants with other organisms and their role in the environment; how to manage plants that are grown for food, fiber and fuel. Our major allows students to develop expertise in these areas, prepare for a career in fields such as biotechnology and environmental management, and move forward to advanced graduate studies.

Plant Science Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses 102.5-103.5 credits)

Required Major Courses (25 credits)

- BTNY 11000 - Introduction To Plant Science
- BTNY 11100 - Principles Of Plant Biology
- BTNY 20700 - The Microbial World
- BTNY 30200 - Plant Ecology
- BTNY 30500 - Fundamentals Of Plant Classification
- BTNY 31600 - Plant Anatomy
• BTNY 49700 - Undergraduate Seminar
• BTNY 49800 - Research In Plant Science

Other Departmental /Program Course Requirements (77.5-78.5 credits)

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 12500 - Introduction To Plant Science
• AGRY 32000 - Genetics
• AGRY 32100 - Genetics Laboratory
• BCHM 30700 - Biochemistry
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• CHM 25700 - Organic Chemistry
• CHM 25701 - Organic Chemistry Laboratory
• HORT 30100 - Plant Physiology
• MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
• PHYS 21400 - The Nature Of Physics
• STAT 30100 - Elementary Statistical Methods

• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Focus Selective - Credit Hours: 18.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communications Selective (20000+ level) - Credit Hours: 3.00

Electives (16.5-17.5 credits)

Elective - Credit Hours: 16.50-17.50

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Requirements

Click here for Plant Science- Supplemental Information

Program Requirements

Fall 1st Year

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 12500 - Introduction To Plant Science
• BTNY 11000 - Introduction To Plant Science
• CHM 11100 - General Chemistry
• MA 16010 - Applied Calculus I

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

14.5-15.5 Credits

Spring 1st Year

• BTNY 11100 - Principles Of Plant Biology
• BTNY 20700 - The Microbial World
• CHM 11200 - General Chemistry
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Elective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

- BTNY 30500 - Fundamentals Of Plant Classification
- CHM 25700 - Organic Chemistry
- CHM 25701 - Organic Chemistry Laboratory
- Focus Selective - Credit Hours: 3.00
- UCC Humanities selective - Credit Hours: 3.00

14 Credits

Spring 2nd Year

- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- BTNY 30200 - Plant Ecology
- PHYS 21400 - The Nature Of Physics
- UCC Science, Technology, & Society Selective - Credit Hours: 3.00
- Focus Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- BCHM 30700 - Biochemistry
- BTNY 31600 - Plant Anatomy
- Economics Selective - Credit Hours: 3.00
- Focus Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- HORT 30100 - Plant Physiology
- STAT 30100 - Elementary Statistical Methods
- Focus Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
Elective - Credit Hours: 3.00

16 Credits

Fall 4th Year

- BTNY 49800 - Research In Plant Science
- Focus Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Electives - Credit Hours: 6.00

15 Credits

Spring 4th Year

- BTNY 49700 - Undergraduate Seminar
- Focus Selective (30000 level or higher) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Electives - Credit Hours: 4.50-5.50

11.5-12.5 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.
Minor

Plant Biology Minor

Requirements for the Minor (15 credits)

Required Courses (4 credits)

- BTNY 11000 - Introduction To Plant Science

Selective Courses (11 credits)

- BTNY 11100 - Principles Of Plant Biology
- BTNY 20700 - The Microbial World
- BTNY 28500 - Plants And Civilization
- BTNY 30100 - Introductory Plant Pathology
- BTNY 30200 - Plant Ecology
- BTNY 30400 - Introductory Weed Science
- BTNY 30500 - Fundamentals Of Plant Classification
- BTNY 31600 - Plant Anatomy
- BTNY 42000 - Plant Cellular And Developmental Biology
- BTNY 49800 - Research In Plant Science *
- BTNY 55000 - Biology Of Fungi
- HORT 30100 - Plant Physiology

Notes

- Departmental permission is not required to enroll in this minor.
- *A maximum of three credits of BTNY 49800 or comparable research in the plant sciences may be applied to the minor.
- Students in the Plant Science major cannot minor in Plant Biology.

Disclaimer

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Plant Pathology Minor

Requirements for the Minor (15 credits)
Required Courses (9 credits)

- BTNY 30100 - Introductory Plant Pathology
- BTNY 52500 - Intermediate Plant Pathology
- BTNY 53500 - Plant Disease Management

Selective Courses (6 credits)

- BTNY 20700 - The Microbial World
- BTNY 49800 - Research In Plant Science *
- BTNY 51700 - Diseases Of Agronomic Crops
- BTNY 55000 - Biology Of Fungi

Notes

- Departmental permission is not required to enroll in this minor.
- * A maximum of three credits of BTNY 49800 or comparable research in the plant sciences may be applied to the minor.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

**Weed Science Minor**

Requirements for the Minor (15 credits)

A. Required Courses (6 credits)

- BTNY 30400 - Introductory Weed Science
- BTNY 50400 - Advanced Weed Science or
- BTNY 50500 - Advanced Biology Of Weeds

B. Selectives (9 credits)

- BTNY 30200 - Plant Ecology
- BTNY 30500 - Fundamentals Of Plant Classification
- BTNY 31600 - Plant Anatomy
- BTNY 35000 - Biotechnology In Agriculture
- BTNY 49800 - Research In Plant Science *
- HORT 30100 - Plant Physiology
Notes

- Department permission is not required to enroll in this minor.
- *A maximum of three credits of BTNY 49800 or comparable research in the plant sciences may be applied to the minor.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Department of Entomology

Overview

Vision

To be a leader recognized worldwide for the solutions and discoveries generated through the application of science focused on arthropod and nematode biology.

Mission

To improve the quality of life for the state, nation and the world by advancing scientific knowledge through the development and application of arthropod/nematode science.

Core Values

- Strive to be pace setting in everything we do
- Encourage the highest standards of ethics and citizenship
- Operate in an open, objective, and inclusive environment
- A community of scholars committed to excellence and teamwork
- Promote the synergism that comes from interdisciplinary interactions
- Value our human capital
- Embrace and promote increased diversity
- Adopt emerging information and other technologies as tools - not final solutions
- Resolve to actively disseminate our knowledge to people of all ages

Faculty

Department of Entomology Website

Contact Information
Graduate Information

For Graduate Information please see Entomology Graduate Program Information.

Baccalaureate

Insect Biology, BS

About the Program

Insect Biology Majors study insects and related organisms. The program emphasizes "hands on learning" with opportunities for faculty mentored undergraduate research, field and laboratory experiences and study abroad options. Insect biologists apply knowledge and modern technology to address grand challenges including protection of human and animal health, food, and property, and natural environments. Insect biologists work as scientists, educators, technicians, consultants, and specialists in urban, agricultural, and natural environments to prevent the spread of disease, feed the world, promote biodiversity, protect the environment, solve crimes, strengthen biosecurity, and teach science. Careers are as diverse as the insects we study.

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (101-102 credits)

Required Major Courses (43 credits)

- ENTM 10100 - Insect Biology And Societal Grand Challenges
- ENTM 10200 - The Practice Of Science
- ENTM 20100 - Scientific And Technical Communication
- ENTM 20600 - General Entomology
• ENTM 20700 - General Entomology Laboratory
• ENTM 21000 - Introduction To Insect Behavior
• ENTM 25300 - Insect Physiology And Biochemistry
• ENTM 30100 - Experimentation And Analysis
• ENTM 31100 - Insect Ecology
• ENTM 31200 - Insect Chemical Ecology
• ENTM 33500 - Introduction To Insect Identification
• ENTM 35300 - Insecticides And Environment
• ENTM 39300 - Insect Biology Practicum
• ENTM 40100 - Addressing Grand Challenges Through Insect Biology
• ENTM 41000 - Applied Insect Biology
• ENTM 49310 - Insect Biology Capstone Experience
• ENTM 49390 - Insect Biology Capstone Forum

• ENTM 41001 - Insects Of Urban Landscapes or
• ENTM 41002 - Insects Of Agricultural Crops

Other Departmental /Program Course Requirements (58-59 credits)

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11700 - Introduction To Entomology Academic Programs
• AGRY 32000 - Genetics
• AGRY 32100 - Genetics Laboratory
• BIOL 11000 - Fundamentals Of Biology I
• BIOL 11100 - Fundamentals Of Biology II
• BTNY 35000 - Biotechnology In Agriculture
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• PHYS 21400 - The Nature Of Physics
• STAT 30100 - Elementary Statistical Methods

• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Calculus Selective (satisfies Quantitative Reasoning for core) - Credit Hours: 3.00 ♦
• Directed Science Selective - Credit Hours: 3.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• UCC STS - Credit Hours:3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
Electives (18-19 credits)

- Electives - Credit Hours: 18.00 - 19.00

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Requirements

Click here for Insect Biology Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11700 - Introduction To Entomology Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- ENTM 10100 - Insect Biology And Societal Grand Challenges
- ENTM 10200 - The Practice Of Science
Calculus Selective - Credit Hours: 3.00

14 Credits

Spring 1st Year

- BIOL 11100 - Fundamentals Of Biology II
- CHM 11200 - General Chemistry
- ENTM 21000 - Introduction To Insect Behavior
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- Economics Selective - Credit Hours: 3.00

16-17 Credits

Fall 2nd Year

- ENTM 20100 - Scientific And Technical Communication
- ENTM 20600 - General Entomology
- ENTM 20700 - General Entomology Laboratory
- PHYS 21400 - The Nature Of Physics
- STAT 30100 - Elementary Statistical Methods
- UCC Humanities Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- ENTM 31100 - Insect Ecology
- ENTM 25300 - Insect Physiology And Biochemistry
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- ENTM 30100 - Experimentation And Analysis
- ENTM 33500 - Introduction To Insect Identification
- ENTM 39300 - Insect Biology Practicum
- UCC STS Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- BTNY 35000 - Biotechnology In Agriculture
- ENTM 31200 - Insect Chemical Ecology
- ENTM 35300 - Insecticides And Environment
- ENTM 39300 - Insect Biology Practicum
- Directive Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Fall 4th Year

- ENTM 41000 - Applied Insect Biology
- ENTM 49310 - Insect Biology Capstone Experience
- ENTM 41001 - Insects Of Urban Landscapes or
- ENTM 41002 - Insects Of Agricultural Crops
- Electives - Credit Hours: 9.00-10.00

14-15 Credits

Spring 4th Year

- ENTM 40100 - Addressing Grand Challenges Through Insect Biology
- ENTM 49310 - Insect Biology Capstone Experience
- ENTM 49390 - Insect Biology Capstone Forum
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.
Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Minor

Forensic Sciences Minor

Requirements for the Minor (20 credits)

Required Courses (11 credits)

- ENTM 22810 - Forensic Investigation
- ENTM 22820 - Forensic Analysis
- ENTM 22830 - Forensic Testimony And Ethics

Selective Courses (9 credits)

- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- AGRY 33500 - Weather And Climate
- AGRY 34900 - Soil Ecology
- AGRY 35500 - Soil Morphology And Geography
- AGRY 36500 - Soil Fertility
- AGRY 38500 - Environmental Soil Chemistry
- AGRY 56500 - Soils And Landscapes
- AGRY 58000 - Soil Microbiology
- ANTH 31000 - Mortuary Practices Across Cultures
- ANTH 33600 - Human Variation
- ANTH 40500 - Ethnographic Methods
ANTH 42500 - Archaeological Method And Theory
ANTH 42800 - Field Methods In Archaeology
ANTH 43600 - Human Evolution
ANTH 53400 - Human Osteology
ANTH 53500 - Foundations Of Biological Anthropology
ANTH 58900 - Archaeology And Materials Science
ANTH 59200 - Selected Topics In Anthropology
BCHM 22100 - Analytical Biochemistry
BCHM 32200 - Analytical Biochemistry II
BCHM 56200 - General Biochemistry II
BIOL 22100 - Introduction To Microbiology
BIOL 23100 - Biology III: Cell Structure And Function
BIOL 23200 - Laboratory In Biology III: Cell Structure And Function
BIOL 24100 - Biology IV: Genetics And Molecular Biology
BIOL 24200 - Laboratory In Biology IV: Genetics And Molecular Biology
BIOL 41500 - Introduction To Molecular Biology
BIOL 43800 - General Microbiology
BIOL 43900 - Laboratory In General Microbiology
BIOL 44400 - Human Genetics
BIOL 47800 - Introduction to Bioinformatics
BIOL 49500 - Special Assignments
BIOL 53300 - Medical Microbiology
BIOL 58000 - Evolution
CNIT 42000 - Basic Cyber Forensics
CNIT 45500 - Network Security
CNIT 45600 - Wireless Security And Management
CNIT 51100 - Foundations In Homeland Security Studies
CNIT 51200 - Managing Resources And Applications For Homeland Security
CNIT 55700 - Advanced Research Topics In Cyber Forensics
ENTM 20600 - General Entomology
ENTM 20700 - General Entomology Laboratory
ENTM 21000 - Introduction To Insect Behavior
ENTM 33500 - Introduction To Insect Identification
ENTM 51000 - Insect Pest Management
ENTM 52500 - Medical And Veterinary Entomology
ENTM 55100 - Insect Physiology And Biochemistry
FNR 22500 - Dendrology
FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles
FNR 25150 - Ecology And Systematics Of Mammals And Birds
FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds
FNR 30500 - Conservation Genetics
FNR 34100 - Wildlife Habitat Management
FNR 34800 - Wildlife Investigational Techniques
HSCI 33300 - Introduction To Immunology
HSCI 56000 - Toxicology
MGMT 53200 - Forensic Accounting And Fraud Examination
POL 42500 - Environmental Law And Politics
• POL 42800 - The Politics Of Regulation
• PSY 33500 - Stereotyping And Prejudice
• PSY 35000 - Abnormal Psychology
• PSY 42800 - Drugs And Behavior
• PSY 44300 - Aggression And Violence
• PSY 53500 - Psychology Of Death And Dying
• SOC 32400 - Criminology
• SOC 32700 - Crime, Deviance And Mass Media
• SOC 32800 - Criminal Justice
• SOC 35600 - Hate And Violence
• SOC 41900 - Sociology Of Law
• SOC 42600 - Social Deviance And Control
• SOC 45400 - Family Violence
• AGRY 25500 - Soil Science or
  AGRY 27000 - Forest Soils
• BCHM 30700 - Biochemistry or
  CHM 33300 - Principles Of Biochemistry or
  CHM 33900 - Biochemistry: A Molecular Approach
• BCHM 30900 - Biochemistry Laboratory or
  CHM 33901 - Biochemistry Laboratory
• BCHM 56100 - General Biochemistry I or
  CHM 53300 - Introductory Biochemistry
• BIOL 20300 - Human Anatomy And Physiology or
  BIOL 30100 - Human Design: Anatomy And Physiology
• BIOL 20400 - Human Anatomy And Physiology or
  BIOL 30200 - Human Design: Anatomy And Physiology
• CHM 32100 - Analytical Chemistry I or
• CHM 22400 - Introductory Quantitative Analysis or
  CHM 32300 - Analytical Chemistry I Honors
• CHM 25500 - Organic Chemistry or
  CHM 25700 - Organic Chemistry or
  CHM 26505 - Organic Chemistry
• CHM 25501 - Organic Chemistry Laboratory or
  CHM 25701 - Organic Chemistry Laboratory or
  CHM 26500 - Organic Chemistry Laboratory or
  CHM 26700 - Organic Chemistry Laboratory Honors
• PHYS 17200 - Modern Mechanics or
• PHYS 21800 - General Physics or
Insect Biology Minor

Requirements for the Minor (15 credits)

Required Courses (3 credits)

- ENTM 20600 - General Entomology
- ENTM 20700 - General Entomology Laboratory

Selective Courses (12 credits)

- ENTM 10500 - Insects: Friend And Foe
- ENTM 21000 - Introduction To Insect Behavior
- ENTM 31100 - Insect Ecology
- ENTM 33500 - Introduction To Insect Identification
- ENTM 35100 - Bee Biology And Bee Keeping
- ENTM 51000 - Insect Pest Management
- ENTM 52500 - Medical And Veterinary Entomology

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.
The Department of Food Science at Purdue University is committed to impacting the world food system and quality of life by educating and training undergraduate and graduate students for careers in industry, government, and academia. Our mission is to expand and transfer knowledge for continuous improvement of the safety, quality, value, and security of the world's food supply through basic research and outreach programs. Our faculty, staff, and students are located on Purdue University's main campus in the Philip E. Nelson Hall of Food Science, 745 Agriculture Mall Drive, West Lafayette, Indiana 47907. This building provides excellent research laboratories, as well as specialized facilities such as the sensory evaluation laboratory, pilot scale-manufacturing plant, student product development and innovation laboratory, and enology library for us to engage with the food and beverage industry and government partners.

Faculty

Contact Information

Department of Food Science
Purdue University
Nelson Hall of Food Science
745 Agriculture Mall Drive
West Lafayette, IN 47907
Phone: (765) 494-2766
Email: foodsci@purdue.edu
Website
The main office for the department is located in Room 2211 of the NLSN Building.

Graduate Information

For Graduate Information please see Food Sciences Graduate Program Information.

Baccalaureate

Food Science, BS

About the Program

The field of Food Science applies science, such as microbiology and biochemistry, to discover ways to improve the taste, nutrition, and value of the food supply. A food scientist possesses the skills necessary to convert raw food products into safe, attractive foods and beverages. Graduates apply scientific knowledge and economic principles to food production, storage, distribution, product development, quality control, inspection, and sales, or they, pursue graduate studies in food processing, microbiology, or chemistry.

Food Science Website

Degree Requirements
120 Credits Required

Departmental/Program Major Courses (107-108 credits)

Required Major Courses (34 credits)

- FS 16100 - Science Of Food
- FS 24500 - Food Packaging
- FS 29800 - Sophomore Seminar
- FS 34000 - Introduction To Food Law And Regulations
- FS 34100 - Food Processing I
- FS 34200 - Food Processing I Laboratory
- FS 36100 - Food Plant Sanitation
- FS 36200 - Food Microbiology
- FS 36300 - Food Microbiology Laboratory
- FS 43500 - Sensory Science
- FS 44200 - Food Processing II
- FS 44300 - Food Product Design (Capstone)
- FS 44400 - Statistical Process Control
- FS 44700 - Food Processing II Laboratory
- FS 45300 - Food Chemistry
- FS 45400 - Food Chemistry Laboratory
- FS 46700 - Food Analysis
- FS 46900 - Food Analysis Laboratory
- FS 48200 - Food Science Senior Seminar
- FS 53000 - Food Ingredient Technology

Other Departmental /Program Course Requirements (73-74 credits)

(See Advising Resources)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11800 - Introduction To Food Science Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 11100 - Fundamentals Of Biology II
- BIOL 22100 - Introduction To Microbiology ♦
- CHM 11500 - General Chemistry
- CHM 11600 - General Chemistry
- CHM 25700 - Organic Chemistry
- CHM 25701 - Organic Chemistry Laboratory
- BCHM 30700 - Biochemistry
- BCHM 30900 - Biochemistry Laboratory
- MA 16010 - Applied Calculus I
- MA 16020 - Applied Calculus II
- NUTR 31500 - Fundamentals Of Nutrition
- PHYS 22000 - General Physics ♦
- STAT 30100 - Elementary Statistical Methods
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Professional Communications Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ Level) - Credit Hours: 3.00

**Electives (12 - 13 credits)**

**University Core Requirements**

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

**Prerequisite Information:**

For current pre-requisites for courses, click here.

**Additional Requirements**

Click here for Food Science Supplemental Information

**Program Requirements**
Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11800 - Introduction To Food Science Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11500 - General Chemistry
- FS 16100 - Science Of Food
- MA 16010 - Applied Calculus I

15 Credits

Spring 1st Year

- BIOL 11100 - Fundamentals Of Biology II
- CHM 11600 - General Chemistry
- MA 16020 - Applied Calculus II

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- Elective - Credit Hours: 1.00

15-16 Credits

Fall 2nd Year

- BIOL 22100 - Introduction To Microbiology ♦
- CHM 25700 - Organic Chemistry
- CHM 25701 - Organic Chemistry Laboratory
- FS 29800 - Sophomore Seminar
- STAT 30100 - Elementary Statistical Methods

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Spring 2nd Year

- BCHM 30700 - Biochemistry ♦
- BCHM 30900 - Biochemistry Laboratory
- FS 24500 - Food Packaging
- PHYS 22000 - General Physics ♦
- Economics Selective - Credit Hours: 3.00
15 Credits

Fall 3rd Year

- FS 34100 - Food Processing I
- FS 34200 - Food Processing I Laboratory
- FS 36100 - Food Plant Sanitation
- FS 36200 - Food Microbiology
- FS 36300 - Food Microbiology Laboratory
- NUTR 31500 - Fundamentals Of Nutrition
- UCC Humanities Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

17 Credits

Spring 3rd Year

- FS 45300 - Food Chemistry
- FS 45400 - Food Chemistry Laboratory
- FS 46700 - Food Analysis
- FS 46900 - Food Analysis Laboratory
- Written or Oral Communication Selective (20000+ Level) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- FS 44200 - Food Processing II
- FS 44400 - Statistical Process Control
- FS 44700 - Food Processing II Laboratory
- FS 48200 - Food Science Senior Seminar
- FS 53000 - Food Ingredient Technology
- Professional Communication Selective - Credit Hours: 3.00
- Humanities or Social Sciences Selective - Credit Hours: 3.00

12 Credits

Spring 4th Year

- FS 34000 - Introduction To Food Law And Regulations
- FS 43500 - Sensory Science
- FS 44300 - Food Product Design (Capstone)
• Humanities or Social Sciences Selective - Credit Hours: 3.00
• Humanities or Social Sciences Selective (30000+) - Credit Hours: 3.00
• Electives - Credit Hours: 3.00 - 4.00

14-15 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Minimum GPA of 2.50 in FS core classes and NUTR 31500 is required for graduation

Students must meet a minimum GPA ≥ 2.50 in math and science courses to enroll in upper division FS courses.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

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Minor

Fermentation Sciences Minor

About this Program:

Enable students enrolled in the program to develop specific science-based knowledge, skills and expertise in the fermentation sciences area to broaden their employment and/or entrepreneurial opportunities.

Currently, there is enormous interest in the use of microorganisms at an industrial level in fields such as the pharmaceutical, chemical, and food industries. Even though fermentations have been used since ancient times as methods for food preservation, the industrial potential for sustainable production of many types of bio-based materials (ranging from foods and beverages, to biofuels, bioplastics, biopharmaceuticals, and fine chemicals) is only beginning to be explored.
Requirements for the Minor (18 credits)

Required Courses (3 credits)

- FS 16300 - Introduction To Fermentation Sciences

Minor Selectives - Choose Two (6 credits)

- BCHM 30700 - Biochemistry or
- BCHM 46200 - Metabolism or
- BCHM 56100 - General Biochemistry I or
- MCMP 20800 - Biochemistry For Pharmaceutical Sciences AND
- BIOL 22100 - Introduction To Microbiology or
- BIOL 43800 - General Microbiology

Additional Courses: (9 credits)

- ABE 30400 - Bioprocess Engineering Laboratory
- ABE 58000 - Process Engineering Of Renewable Resources
- ABE 59100 - Special Topics - Principles of Systems and Synthetic Biology - Credit Hours: 3.00
- FS 47000 - Wine Appreciation
- FS 49100 - Special Assignments In Food Science
  - Dairy Products - Credit Hours: 1.00
  - Anaerobic Microbial Physiology - Credit Hours: 3.00
  - Crucial Metabolic Pathways in Food Fermentation - Credit Hours: 1.00
- FS 50600 - Commercial Grape And Wine Production
- FS 56400 - Commercial Food And Beverage Fermentations
- FS 59100 - Special Topics - Commercial Food and Beverage Fermentations Lab - Credit Hours: 1.00
- GER 28000 - German Special Topics - Beer & Brewing in Germany - Credit Hours: 3.00
- HORT 50600 - Commercial Grape And Wine Production

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Food Science Minor

Requirements for the Minor (18 credits)

Required Courses (11 credits)

- FS 16100 - Science Of Food
Selective Courses (7 credits)

- ANSC 35100 - Meat Science
- ANSC 35101 - Meat Science Laboratory
- NUTR 31500 - Fundamentals Of Nutrition
- FS 10000-59999* - All Food Sciences courses - Credit Hours: 3.00

Notes

- Department permission is not required to enroll in this minor.
- * Maximum of 3 credits of independent study (FS 29100 or FS 49100).

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Pet Food Processing Minor

Requirements for the Minor (21 credits)

Required Courses (21 credits)

- ANSC 10600 - Biology Companion Animal *
- ANSC 32400 - Applied Animal Nutrition
- ANSC 44600 - Companion Animal Management
- FS 16100 - Science Of Food
- FS 34100 - Food Processing I
- FS 34200 - Food Processing I Laboratory
- FS 36200 - Food Microbiology
- FS 44200 - Food Processing II
- FS 44700 - Food Processing II Laboratory

Notes

- Department permission is not required to enroll in this minor.
- * (3) ANSC 10200 (Introduction to Animal Agriculture) can be substituted for ANSC 10600, but ANSC 10600 is preferred for this minor.

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Department of Forestry and Natural Resources

Overview

Welcome to the Department of Forestry and Natural Resources (FNR)! As one of the nation's elite programs in ecology and evolutionary biology, it is our mission to develop and disseminate knowledge associated with the protection, management, and sustainable use of terrestrial and aquatic ecosystems. FNR is training the next generation of professionals in the natural resource sciences, which includes fisheries and aquatic sciences, forestry, wildlife, and sustainable biomaterials: process and product design.

Faculty

Contact Information

The Department of Forestry and Natural Resources

Purdue University
Pfendler Hall
715 West State Street
West Lafayette IN 47907-2061

Phone: 765-494-3591

Email: joinfnr@purdue.edu

Website

The main office for the department is located in Room 125 in PFEN Hall.

Graduate Information

For Graduate Information please see Forestry and Natural Resources Graduate Program Information.

Baccalaureate

Aquatic Sciences: Fisheries Concentration, BS

About the Program

The Fisheries concentration will provide students with applied training relevant to fisheries science and management fields. It will build on what was previously offered in the FAQS curriculum by offering new courses focused on Fish Population
Dynamics and Practical Fisheries Management. The Fisheries concentration is developed such that when a student completes the major/concentration she/he would have completed all coursework necessary to qualify as a Certified Fisheries Professional through the American Fisheries Society (www.fisheries.org).

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (65-66 credits)

Required Major Courses (59-60 credits)

- FNR 12500 - Environmental Science And Conservation
- FNR 20100 - Marine Biology
- FNR 21000 - Natural Resource Information Management
- FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 25150 - Ecology And Systematics Of Mammals And Birds
- FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds
- FNR 30500 - Conservation Genetics
- FNR 35100 - Aquatic Sampling Techniques ♦
- FNR 37010 - Natural Resources Practicum
- FNR 37100 - Fisheries And Aquatic Sciences Practicum
- FNR 37500 - Human Dimensions of Natural Resource Management
- FNR 38400 - Statistics For Natural Resources
- FNR 38500 - Fish Biology And Ecology
- FNR 40100 - Limnology
- FNR 45200 - Aquaculture
- FNR 45600 - Fish And Marine Population Dynamics
- FNR 45700 - Practical Fisheries Management
- FNR 47000 - Fundamentals Of Planning
- FNR 22310 - Introduction To Environmental Policy or
- POL 22300 - Introduction To Environmental Policy
- FNR 23000 - The World's Forests And Society or
- FNR 48800 - Global Environmental Issues
- FNR 52700 - Ecotoxicology or
- FNR 52800 - Wildlife And Environmental Forensics or
- FNR 52900 - Disease Ecology

Major Selectives (6 credits)

- Aquatics Selective - Credit Hours: 3.00
- Aquatics Selective - Credit Hours: 3.00
Other Departmental /Program Course Requirements (50-51 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 28600 - Introduction To Ecology And Evolution
- BNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- STAT 30100 - Elementary Statistical Methods
- AGE 20300 - Introductory Microeconomics For Food And Agribusiness or
- AGE 20400 - Introduction To Resource Economics And Environmental Policy or
- ECON 25100 - Microeconomics
- AGRY 25500 - Soil Science or
- AGRY 27000 - Forest Soils
- PHIL 11100 - Ethics or
- PHIL 28000 - Ethics And Animals or
- PHIL 29000 - Environmental Ethics
- ENGL 10600 - First-Year Composition (satisfies Written Communication and Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Physical Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective - Credit Hours: 3.00

Electives (3-5 credits)

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Requirements
University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year

- FNR 12500 - Environmental Science And Conservation
- BTNY 11000 - Introduction To Plant Science
- CHM 11200 - General Chemistry

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
Elective - Credit Hours: 3.00-5.00

16-18 Credits

Fall 2nd Year

- FNR 20100 - Marine Biology
- FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles
- STAT 30100 - Elementary Statistical Methods
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or
- AGEC 20400 - Introduction To Resource Economics And Environmental Policy or
- ECON 25100 - Microeconomics
- Written or Oral Communication Selective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- BIOL 28600 - Introduction To Ecology And Evolution
- FNR 21000 - Natural Resource Information Management
- FNR 25150 - Ecology And Systematics Of Mammals And Birds
- FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds
- FNR 35100 - Aquatic Sampling Techniques ♦
- AGRY 25500 - Soil Science or
- AGRY 27000 - Forest Soils

15 Credits

Summer Session

- FNR 37010 - Natural Resources Practicum
- FNR 37100 - Fisheries And Aquatic Sciences Practicum

6 Credits

Fall 3rd Year

- FNR 45600 - Fish And Marine Population Dynamics
- FNR 22310 - Introduction To Environmental Policy or
- POL 22300 - Introduction To Environmental Policy
• FNR 23000 - The World's Forests And Society or
• FNR 48800 - Global Environmental Issues

• Humanities or Social Science Selective - Credit Hours: 3.00

12 Credits

Spring 3rd Year

• FNR 30500 - Conservation Genetics
• FNR 38400 - Statistics For Natural Resources
• FNR 38500 - Fish Biology And Ecology
• FNR 40100 - Limnology

13 Credits

Fall 4th Year

• FNR 45700 - Practical Fisheries Management
• FNR 47000 - Fundamentals Of Planning
• Aquatics Science Selective - Credit Hours: 3.00
• Aquatics Science Selective - Credit Hours: 3.00
• Physical Science Elective - Credit Hours: 3.00

12 Credits

Spring 4th Year

• FNR 37500 - Human Dimensions of Natural Resource Management
• FNR 45200 - Aquaculture

• FNR 52700 - Ecotoxicology or
• FNR 52800 - Wildlife And Environmental Forensics or
• FNR 52900 - Disease Ecology

• PHIL 11100 - Ethics or
• PHIL 28000 - Ethics And Animals or
• PHIL 29000 - Environmental Ethics

• Humanities or Social Science Selective - Credit Hours: 3.00

14 Credits

Notes

• 2.0 GPA required for Bachelor of Science degree.
Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Aquatic Sciences: Marine and Freshwater Biology Concentration, BS

About the Program

The Marine and Freshwater Biology concentration will provide education and training opportunities for students interested in aquatic sciences more broadly. New marine science-focused courses have been added to this concentration in response to interests of a large number of Purdue students, as evidenced by high enrollment in FNR 20100 Marine Biology (i.e. >50 each semester offered) and high participation in the Purdue University Marine Biology Club (i.e., 15 members each year). We have added a number of new and existing courses to this concentration, including a Marine Biology Practicum, an Advanced Marine Biology course and a Physical Oceanography course. This will provide students with rigorous training in the marine sciences and will place Purdue one of the leader in marine science education in the Midwest, offering a comprehensive program that is similar to Michigan State University's Zoology major with a concentration in Marine Biology. The AQSC major will also offer a new course on Limnology - a critical skill for Marine and Freshwater Biology and one that has been lacking from FAQS for many years.

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (63-64 credits)

Required Major Courses (60-61 credits)

- FNR 12500 - Environmental Science And Conservation
• FNR 20100 - Marine Biology
• FNR 21000 - Natural Resource Information Management
• FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
• FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles
• FNR 25150 - Ecology And Systematics Of Mammals And Birds
• FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds
• FNR 30500 - Conservation Genetics
• FNR 35100 - Aquatic Sampling Techniques ♦
• FNR 37010 - Natural Resources Practicum
• FNR 37100 - Fisheries And Aquatic Sciences Practicum
• FNR 37500 - Human Dimensions of Natural Resource Management
• FNR 37800 - Marine Biology Practicum
• FNR 38400 - Statistics For Natural Resources
• FNR 38500 - Fish Biology And Ecology
• FNR 40100 - Limnology
• FNR 45600 - Fish And Marine Population Dynamics
• FNR 45800 - Advanced Marine Biology
• FNR 47000 - Fundamentals Of Planning
• FNR 22310 - Introduction To Environmental Policy or
• POL 22300 - Introduction To Environmental Policy
• FNR 23000 - The World's Forests And Society or
• FNR 48800 - Global Environmental Issues
• FNR 52700 - Ecotoxicology or
• FNR 52800 - Wildlife And Environmental Forensics or
• FNR 52900 - Disease Ecology

Major Selectives (3 credits)
• Aquatics Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (50-51 credits)

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
• BIOL 11000 - Fundamentals Of Biology I
• BIOL 28600 - Introduction To Ecology And Evolution
• BTNY 11000 - Introduction To Plant Science
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• EAPS 40300 - Physical Oceanography
• MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or
• AGEC 20400 - Introduction To Resource Economics And Environmental Policy or
- ECON 25100 - Microeconomics
- AGRY 25500 - Soil Science or
  AGRY 27000 - Forest Soils
- PHIL 11100 - Ethics or
  PHIL 28000 - Ethics And Animals or
  PHIL 29000 - Environmental Ethics or
  STAT 30100 - Elementary Statistical Methods
- ENGL 10600 - First-Year Composition (satisfies Written Communication and Information Literacy for core) or
  ENGL 10800 - Accelerated First-Year Composition or
  HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
  COM 21700 - Science Writing And Presentation or
  EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective - Credit Hours: 3.00

**Electives (5-7 credits)**

**College of Agriculture & University Level Requirements**

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

**Additional Requirements**

Click here for Aquatic Sciences: Marine and Freshwater Biology Supplemental Information

**University Core Requirements**

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
Quantitative Reasoning
For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:
For current pre-requisites for courses, click here.

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year

- FNR 12500 - Environmental Science And Conservation
- BTNY 11000 - Introduction To Plant Science
- CHM 11200 - General Chemistry
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Elective - Credit Hours: 3.00-4.00

16-17 Credits

Fall 2nd Year

- FNR 20100 - Marine Biology
- FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles
- STAT 30100 - Elementary Statistical Methods
• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or
• AGEC 20400 - Introduction To Resource Economics And Environmental Policy or
• ECON 25100 - Microeconomics
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits

Spring 2nd Year

• BIOL 28600 - Introduction To Ecology And Evolution
• FNR 21000 - Natural Resource Information Management
• FNR 25150 - Ecology And Systematics Of Mammals And Birds
• FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds
• FNR 35100 - Aquatic Sampling Techniques
• AGRY 25500 - Soil Science or
• AGRY 27000 - Forest Soils

15 Credits

Summer Session

• FNR 37010 - Natural Resources Practicum
• FNR 37100 - Fisheries And Aquatic Sciences Practicum

6 Credits

Fall 3rd Year

• FNR 37800 - Marine Biology Practicum
• FNR 45600 - Fish And Marine Population Dynamics
• FNR 22310 - Introduction To Environmental Policy or
• POL 22300 - Introduction To Environmental Policy
• FNR 23000 - The World's Forests And Society or
• FNR 48800 - Global Environmental Issues

12 Credits

Spring 3rd Year

• FNR 30500 - Conservation Genetics
• FNR 38400 - Statistics For Natural Resources
• FNR 38500 - Fish Biology And Ecology
- FNR 40100 - Limnology

13 Credits

Fall 4th Year

- EAPS 40300 - Physical Oceanography
- FNR 47000 - Fundamentals Of Planning
- PHIL 11100 - Ethics or
- PHIL 28000 - Ethics And Animals or
- PHIL 29000 - Environmental Ethics
- Aquatics Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00

13 Credits

Spring 4th Year

- FNR 37500 - Human Dimensions of Natural Resource Management
- FNR 45800 - Advanced Marine Biology
- FNR 52700 - Ecotoxicology or
- FNR 52800 - Wildlife And Environmental Forensics or
- FNR 52900 - Disease Ecology
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00-3.00

13-14 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course
The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Fisheries & Aquatic Sciences, BS

About the Program

Prepare for a career in fisheries research and management, lake and stream management, aquaculture, and interdisciplinary studies of environmental problems. Studies emphasize understanding ecosystems function, natural and human disturbance, and ecosystem resilience. You are preparing for work in public organizations (state/federal fish and wildlife), not-for-profit organizations (Nature Conservancy), private consulting firms, or for graduate studies (MS, PhD, DVM). This degree meets the educational requirements for the American Fisheries Society's Professional Certification.

Fisheries and Aquatic Sciences Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (110-111 credits)

Required Major Courses (54 credits)

- FNR 12500 - Environmental Science And Conservation
- FNR 20100 - Marine Biology
- FNR 21000 - Natural Resource Information Management
- FNR 23000 - The World's Forests And Society
- FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 25150 - Ecology And Systematics Of Mammals And Birds
- FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds
- FNR 30500 - Conservation Genetics
- FNR 35100 - Aquatic Sampling Techniques ♦
- FNR 37010 - Natural Resources Practicum
- FNR 37100 - Fisheries And Aquatic Sciences Practicum
- FNR 37500 - Human Dimensions of Natural Resource Management
- FNR 45200 - Aquaculture
- FNR 45600 - Fish And Marine Population Dynamics
- FNR 47000 - Fundamentals Of Planning
- FNR 55100 - Advanced Ichthyology
- FNR 22310 - Introduction To Environmental Policy or POL 22300 - Introduction To Environmental Policy
- FNR 45300 - Fish Physiology or FNR 45500 - Fish Ecology
- FNR 52600 - Aquatic Animal Health or FNR 52700 - Ecotoxicology

**Major Selectives (6 credits)**
- FNR Physical Science Selective - Credit Hours: 3.00
- FNR Physical Science Selective - Credit Hours: 3.00

**Other Departmental /Program Course Requirements (50-51 credits)**
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- BIOL 28600 - Introduction To Ecology And Evolution
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MA 16020 - Applied Calculus II
- STAT 30100 - Elementary Statistical Methods
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or AGEC 20400 - Introduction To Resource Economics And Environmental Policy or ECON 25100 - Microeconomics
- AGRY 25500 - Soil Science or AGRY 27000 - Forest Soils
- PHIL 11100 - Ethics or PHIL 28000 - Ethics And Animals or PHIL 29000 - Environmental Ethics
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or ENGL 10800 - Accelerated First-Year Composition or HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or COM 21700 - Science Writing And Presentation or EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000-Level+) - Credit Hours: 3.00

Elective (9-10 credits)

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Degree Requirements

Click here for Fisheries and Aquatic Sciences Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
• MA 16010 - Applied Calculus I

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year

• BTNY 11000 - Introduction To Plant Science
• CHM 11200 - General Chemistry
• FNR 12500 - Environmental Science And Conservation
• MA 16020 - Applied Calculus II

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 2nd Year

• FNR 20100 - Marine Biology
• FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
• FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles
• STAT 30100 - Elementary Statistical Methods

• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or
• AGEC 20400 - Introduction To Resource Economics And Environmental Policy or
• ECON 25100 - Microeconomics

• Written or Oral Communication Selective (20000-level+) - Credit Hours: 3.00

16 Credits

Spring 2nd Year

• BIOL 28600 - Introduction To Ecology And Evolution
• FNR 21000 - Natural Resource Information Management
• FNR 25150 - Ecology And Systematics Of Mammals And Birds
• FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds
• FNR 35100 - Aquatic Sampling Techniques ♦

• AGRY 25500 - Soil Science or
• AGRY 27000 - Forest Soils
15 Credits

**Summer Session**
- FNR 37010 - Natural Resources Practicum
- FNR 37100 - Fisheries And Aquatic Sciences Practicum

6 Credits

**Fall 3rd Year**
- FNR 23000 - The World's Forests And Society
- FNR 45600 - Fish And Marine Population Dynamics
- FNR 22310 - Introduction To Environmental Policy or
  POL 22300 - Introduction To Environmental Policy

13 Credits

**Spring 3rd Year**
- FNR 30500 - Conservation Genetics
- FNR 37500 - Human Dimensions of Natural Resource Management
- FNR 45300 - Fish Physiology or
  FNR 45500 - Fish Ecology
- FNR Physical Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

**Fall 4th Year**
- FNR 47000 - Fundamentals Of Planning
- FNR 52600 - Aquatic Animal Health or
  FNR 52700 - Ecotoxicology
- PHIL 11100 - Ethics or
- PHIL 28000 - Ethics And Animals or
  PHIL 29000 - Environmental Ethics
- FNR Physical Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
12 Credits

Spring 4th Year

- FNR 45200 - Aquaculture
- FNR 55100 - Advanced Ichthyology
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00 - 4.00

12-13 Credits

Notes

- 2.0 GPA required for Bachelor of Science degree.
- Consultation with an advisor may result in an altered plan customized for an individual student.
- Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Forestry, BSFOR

About the Program

Learn to apply biological, ecological, economic, and social knowledge as you develop and implement sustainable forest management plans. Studies emphasize understanding ecosystems function, natural and human disturbance, and ecosystem resilience. This prepares you for careers with public agencies such as state divisions of forestry, U.S. Forest Service or private industries and consulting firms. This program is accredited by the Society of American Foresters.

Forestry Website
Degree Requirements

124 Credits Required

Departmental/Program Major Courses (111-112 credits)

Required Major Courses (62 credits)

- FNR 12500 - Environmental Science And Conservation
- FNR 21000 - Natural Resource Information Management
- FNR 22500 - Dendrology ♦
- FNR 23000 - The World’s Forests And Society
- FNR 30110 - Sustainable Forest Products Manufacturing
- FNR 33100 - Forest Ecosystems
- FNR 33900 - Principles Of Silviculture
- FNR 35000 - Natural Resources Measurement ♦
- FNR 35500 - Quantitative Methods For Resource Management
- FNR 35700 - Fundamental Remote Sensing
- FNR 37010 - Natural Resources Practicum
- FNR 37050 - Forest Habitats And Communities Practicum
- FNR 37200 - Forestry Practicum
- FNR 37500 - Human Dimensions of Natural Resource Management
- FNR 40700 - Forest Economics
- FNR 40910 - Forest Resources Management
- FNR 43400 - Tree Physiology
- FNR 47000 - Fundamentals Of Planning

- FNR 22310 - Introduction To Environmental Policy or
- POL 22300 - Introduction To Environmental Policy

- FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles or
- FNR 25150 - Ecology And Systematics Of Mammals And Birds

- FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles or
- FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds

- FNR 30500 - Conservation Genetics or
- FNR 31110 - Structure, Identification And Properties Of Woody Biomaterials or
- FNR 35900 - Spatial Ecology And GIS

- FNR 38400 - Statistics For Natural Resources or
- ENTM 30100 - Experimentation And Analysis

- (30000+ level CoA Humanities)

Major Selectives (3 credits)
• Forest Health Selective - Credit Hours: 3.00

Other Departmental /Program Course Requirements (50-51 credits)

• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
• AGRY 27000 - Forest Soils
• BIOL 28600 - Introduction To Ecology And Evolution
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
• STAT 30100 - Elementary Statistical Methods

• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or
• AGEC 20400 - Introduction To Resource Economics And Environmental Policy or
• ECON 25100 - Microeconomics

• BIOL 11000 - Fundamentals Of Biology I or
• BTNY 11000 - Introduction To Plant Science

• BIOL 11100 - Fundamentals Of Biology II or
• BTNY 11100 - Principles Of Plant Biology

• PHIL 11100 - Ethics or
• PHIL 28000 - Ethics And Animals or
• PHIL 29000 - Environmental Ethics

• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (8-9 credits)

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Requirements

Click here for Forestry Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I

- BIOL 11000 - Fundamentals Of Biology I or
- BTNY 11000 - Introduction To Plant Science

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year
• CHM 11200 - General Chemistry
• FNR 12500 - Environmental Science And Conservation
• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or
• AGEC 20400 - Introduction To Resource Economics And Environmental Policy or
• ECON 25100 - Microeconomics
• BIOL 11100 - Fundamentals Of Biology II or
• BTNY 11100 - Principles Of Plant Biology
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 2nd Year

• FNR 22500 - Dendrology ♦
• FNR 23000 - The World's Forests And Society
• STAT 30100 - Elementary Statistical Methods
• FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles or
• FNR 25150 - Ecology And Systematics Of Mammals And Birds
• FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles or
• FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds

13 Credits

Spring 2nd Year

• AGRY 27000 - Forest Soils
• BIOL 28600 - Introduction To Ecology And Evolution
• FNR 21000 - Natural Resource Information Management
• FNR 35300 - Natural Resources Measurement ♦
• Humanities or Social Science Selective - Credit Hours: 3.00

14 Credits

Summer Session

• FNR 37010 - Natural Resources Practicum
• FNR 37050 - Forest Habitats And Communities Practicum
• FNR 37200 - Forestry Practicum
6 Credits

Fall 3rd Year

- FNR 33100 - Forest Ecosystems
- FNR 35700 - Fundamental Remote Sensing
- FNR 43400 - Tree Physiology
- FNR 22310 - Introduction To Environmental Policy or
- POL 22300 - Introduction To Environmental Policy
- Forest Health Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- FNR 35500 - Quantitative Methods For Resource Management
- FNR 37500 - Human Dimensions of Natural Resource Management
- FNR 40700 - Forest Economics
- FNR 38400 - Statistics For Natural Resources or
- ENTM 30100 - Experimentation And Analysis
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

15 Credits

Fall 4th Year

- FNR 33900 - Principles Of Silviculture
- FNR 47000 - Fundamentals Of Planning
- PHIL 11100 - Ethics or
- PHIL 28000 - Ethics And Animals or
- PHIL 29000 - Environmental Ethics
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 6.00

16 Credits

Spring 4th Year

- FNR 30110 - Sustainable Forest Products Manufacturing
- FNR 40910 - Forest Resources Management
- FNR 30500 - Conservation Genetics or
- FNR 31110 - Structure, Identification And Properties Of Woody Biomaterials or
- FNR 35900 - Spatial Ecology And GIS

- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00 - 3.00

14-15 Credits

Note

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Sustainable Biomaterials - Process and Product Design, BS

About the Program

Students learn the basics of sustainability of biomaterials, product design, processing and conservation. Studies focus on sustainable materials resource evaluation, product strength design, lean manufacturing, end of life options, cradle to grave, cradle to cradle, zero impact theories, and use of life cycle assessment techniques. You will gain experience with complex natural resources utilization issues on a local and global scale. You are prepared for management positions in manufacturing industries, particularly the wood products manufacturing and the hardwood cabinet and furniture industries.

Sustainable Biomaterials - Process and Product Design Website

Degree Requirements
120 Credits Required

Departmental/Program Major Courses (111-112 credits)

Required Major Courses (29 credits)

- FNR 12500 - Environmental Science And Conservation
- FNR 23000 - The World's Forests And Society
- FNR 30110 - Sustainable Forest Products Manufacturing
- FNR 30200 - Global Sustainability Issues
- FNR 31110 - Structure, Identification And Properties Of Woody Biomaterials
- FNR 41800 - Properties Of Wood Related To Manufacturing
- FNR 41910 - Furniture Product Development And Strength Design
- FNR 42500 - Secondary Wood Products Manufacturing
- FNR 48410 - Sustainable Furniture Design For CNC Manufacturing
- FNR 22310 or POL 22300 - Introduction To Environmental Policy

Other Departmental /Program Course Requirements (82-83 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- CGT 11000 - Technical Graphics Communications
- EEE 35500 - Engineering Environmental Sustainability
- ENGL 42100 - Technical Writing
- MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
- MET 14300 - Materials And Processes I
- MET 24500 - Manufacturing Systems
- PHYS 22000 - General Physics
- STAT 30100 - Elementary Statistical Methods
- TLI 23500 - Introduction To Lean And Sustainable Systems
- TLI 31600 - Statistical Quality Control
- TLI 33400 - Economic Analysis For Technology Systems
- TLI 43530 - Operations Planning And Management
- TLI 43540 - Facilities Planning And Material Handling
- AGE 20300 or AGEC 20400 or ECON 25100 - Microeconomics
- PHIL 11100 or PHIL 11100 - Ethics
• PHIL 28000 - Ethics And Animals or
  PHIL 29000 - Environmental Ethics

• ENGL 10600 - First-Year Composition (satisfies Written Communication and Information Literacy for core) or
  ENGL 10800 - Accelerated First-Year Composition or
  HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
  COM 21700 - Science Writing And Presentation or
  EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Sustainability Selectives - Credit Hours: 6.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

Electives (8-9 credits)

• Elective - Credit Hours: 8.00-9.00

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.
Additional Requirements

Click here for Sustainable Biomaterials Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year

- BTNY 11000 - Introduction To Plant Science
- CHM 11200 - General Chemistry
- FNR 12500 - Environmental Science And Conservation
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- PHIL 11100 - Ethics or
- PHIL 28000 - Ethics And Animals or
- PHIL 29000 - Environmental Ethics

16 Credits

Fall 2nd Year

- MET 14300 - Materials And Processes I
- STAT 30100 - Elementary Statistical Methods
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or
- AGEC 20400 - Introduction To Resource Economics And Environmental Policy or
- ECON 25100 - Microeconomics
- FNR 22310 - Introduction To Environmental Policy or
- POL 22300 - Introduction To Environmental Policy
- Sustainability Selectives - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- CGT 11000 - Technical Graphics Communications
- FNR 30110 - Sustainable Forest Products Manufacturing
- PHYS 22000 - General Physics
- TLI 23500 - Introduction To Lean And Sustainable Systems
- Elective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- FNR 23000 - The World's Forests And Society
- FNR 41800 - Properties Of Wood Related To Manufacturing
- ENGL 42100 - Technical Writing
- TLI 31600 - Statistical Quality Control
- Humanities or Social Science Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- EEE 35500 - Engineering Environmental Sustainability
- FNR 31110 - Structure, Identification And Properties Of Woody Biomaterials
- MET 24500 - Manufacturing Systems
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

15 Credits

Fall 4th Year

- FNR 42500 - Secondary Wood Products Manufacturing
- FNR 48410 - Sustainable Furniture Design For CNC Manufacturing
- TLI 33400 - Economic Analysis For Technology Systems
- TLI 43530 - Operations Planning And Management
- Elective - Credit Hours: 3.00

15 Credits
Spring 4th Year

- FNR 30200 - Global Sustainability Issues
- FNR 41910 - Furniture Product Development And Strength Design
- TLI 43540 - Facilities Planning And Material Handling
- Sustainability Selectives - Credit Hours: 3.00
- Elective - Credit Hours: 2.00-3.00

13-14 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Wildlife, BS

About the Program

Learn about wildlife research, management, and education, as well as application of biological, ecological, economic, and social knowledge to wildlife management issues. Studies emphasis understanding ecosystems function, natural and human disturbance, and ecosystem resilience. You are preparing for work in public organizations (state/federal fish and wildlife), not-for-profit organizations (Nature Conservancy, Ducks Unlimited), private consulting firms, or for graduate studies (MS, PhD, DVM). This degree meets the educational standards of The Wildlife Society to become a Certified Wildlife Biologist.

Wildlife Website
Degree Requirements

120 Credits Required

Departmental/Program Major Courses (112-113 credits)

Required Major Courses (54 credits)

- FNR 12500 - Environmental Science And Conservation
- FNR 21000 - Natural Resource Information Management
- FNR 22500 - Dendrology
- FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 25150 - Ecology And Systematics Of Mammals And Birds
- FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds
- FNR 30500 - Conservation Genetics
- FNR 33100 - Forest Ecosystems
- FNR 34100 - Wildlife Habitat Management
- FNR 34800 - Wildlife Investigational Techniques ♦
- FNR 35900 - Spatial Ecology And GIS
- FNR 37010 - Natural Resources Practicum
- FNR 37050 - Forest Habitats And Communities Practicum
- FNR 37300 - Wildlife Practicum
- FNR 37500 - Human Dimensions of Natural Resource Management
- FNR 38400 - Statistics For Natural Resources
- FNR 44700 - Vertebrate Population Dynamics
- FNR 46500 - History And Role Of Hunting In North American Wildlife Conservation
- FNR 47000 - Fundamentals Of Planning
- FNR 22310 - Introduction To Environmental Policy or
- POL 22300 - Introduction To Environmental Policy
- FNR 52700 - Ecotoxicology or
- FNR 52800 - Wildlife And Environmental Forensics or
- FNR 52900 - Disease Ecology
- (30000+ level CoA Humanities)

Major Selectives (8 credits)

- Botany Selective - Credit Hours: 2.00
- Wildlife Selective - Credit Hours: 6.00

Other Departmental /Program Course Requirements (50-51 credits)
• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
• AGRY 27000 - Forest Soils
• BIOL 11000 - Fundamentals Of Biology I
• BIOL 28600 - Introduction To Ecology And Evolution
• BTNY 11000 - Introduction To Plant Science
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
• STAT 30100 - Elementary Statistical Methods
• PHIL 11100 - Ethics (satisfies Human Cultures Humanities for core) or
• PHIL 28000 - Ethics And Animals (satisfies Human Cultures Humanities for core) or
• PHIL 29000 - Environmental Ethics (satisfies Human Cultures Humanities for core)
• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness (satisfies Human Culture Behavioral/Social Science for core) or
• AGEC 20400 - Introduction To Resource Economics And Environmental Policy (satisfies Human Culture Behavioral/Social Science for core) or
• ECON 25100 - Microeconomics (satisfies Human Culture Behavioral/Social Science for core)
• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing
• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Sciences Selective - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (7-8 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture
University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Requirements

Click here for Wildlife Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 11900 - Introduction To Forestry And Natural Resources Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- MA 16010 - Applied Calculus I
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year

- BTNY 11000 - Introduction To Plant Science
- CHM 11200 - General Chemistry
- FNR 12500 - Environmental Science And Conservation
- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness or
• AGEC 20400 - Introduction To Resource Economics And Environmental Policy or
• ECON 25100 - Microeconomics

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

16 Credits

Fall 2nd Year

• FNR 22500 - Dendrology
• FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
• FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles
• STAT 30100 - Elementary Statistical Methods
• Humanities or Social Science Selective - Credit Hours: 3.0

13 Credits

Spring 2nd Year

• AGRY 27000 - Forest Soils
• BIOL 28600 - Introduction To Ecology And Evolution
• FNR 21000 - Natural Resource Information Management
• FNR 25150 - Ecology And Systematics Of Mammals And Birds
• FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds
• FNR 34800 - Wildlife Investigational Techniques

15 Credits

Summer Session

• FNR 37010 - Natural Resources Practicum
• FNR 37050 - Forest Habitats And Communities Practicum
• FNR 37300 - Wildlife Practicum

6 Credits

Fall 3rd Year

• FNR 33100 - Forest Ecosystems
• FNR 34100 - Wildlife Habitat Management

• FNR 22310 - Introduction To Environmental Policy or
• POL 22300 - Introduction To Environmental Policy
- Humanities or Social Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- FNR 37500 - Human Dimensions of Natural Resource Management
- FNR 38400 - Statistics For Natural Resources
- (30000+ level CoA Humanities)
- Botany Selective - Credit Hours: 2.00
- Wildlife Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

14 Credits

Fall 4th Year

- FNR 35900 - Spatial Ecology And GIS
- FNR 44700 - Vertebrate Population Dynamics
- FNR 46500 - History And Role Of Hunting In North American Wildlife Conservation
- FNR 47000 - Fundamentals Of Planning
- FNR 52700 - Ecotoxicology or
- FNR 52800 - Wildlife And Environmental Forensics or
- FNR 52900 - Disease Ecology
- Elective - Credit Hours: 3.00

13 Credits

Spring 4th Year

- FNR 30500 - Conservation Genetics
- PHIL 11100 - Ethics or
- PHIL 28000 - Ethics And Animals or
- PHIL 29000 - Environmental Ethics
- Humanities or Social Science Selective - Credit Hours: 3.00
- Wildlife Selective - Credit Hours: 3.00
- Elective - Credit Hour: 1.00-2.00

13-14 Credits
Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

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Minor

Fisheries and Aquatic Sciences Minor

Requirements for the Minor (16 credits)

Required Courses (7 credits)

- FNR 20100 - Marine Biology
- FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles

Selective Courses (9 credits)

- FNR 37800 - Marine Biology Practicum
- FNR 38500 - Fish Biology And Ecology
- FNR 40100 - Limnology
- FNR 45200 - Aquaculture
- FNR 45300 - Fish Physiology
- FNR 45500 - Fish Ecology
- FNR 45800 - Advanced Marine Biology
- FNR 52700 - Ecotoxicology
Notes

- Departmental permission is not required to enroll in this minor.
- Other FNR 49800 or 59800 courses, with FNR approval may be used.
- For students in other FNR majors, courses required in the student's major cannot be used to meet the 9 credits of selectives for this minor.

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Forest Ecosystems Minor

Requirements for the Minor (18 credits)

Required Courses (12 credits)

- FNR 22500 - Dendrology
- FNR 33100 - Forest Ecosystems
- FNR 33900 - Principles Of Silviculture
- FNR 35300 - Natural Resources Measurement

Selective Courses (6 credits)

- AGRY 27000 - Forest Soils
- BIOL 28600 - Introduction To Ecology And Evolution
- FNR 21000 - Natural Resource Information Management
- FNR 23000 - The World's Forests And Society
- FNR 30110 - Sustainable Forest Products Manufacturing
- FNR 33300 - Fire Effects In Forest Environments
- FNR 35700 - Fundamental Remote Sensing
- FNR 37500 - Human Dimensions of Natural Resource Management
- FNR 40700 - Forest Economics
- FNR 43400 - Tree Physiology
- FNR 53600 - Ecology Of Disturbance
- FNR 53601 - Ecology Of Disturbance Practicum
Notes

- Departmental permission is not required to enroll in this minor.
- Other FNR 49800 or FNR 59800 courses, with FNR approval may be used.
- For students in FNR majors, courses required in the student's major cannot be used to meet the 6 credits of selectives for this minor.

Disclaimer

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Furniture Design Minor

Requirements for the Minor (18 credits)

Required Courses (18 credits)

- AD 53500 - Furniture Design
- FNR 31110 - Structure, Identification And Properties Of Woody Biomaterials
- FNR 41800 - Properties Of Wood Related To Manufacturing
- FNR 41910 - Furniture Product Development And Strength Design
- FNR 42500 - Secondary Wood Products Manufacturing
- FNR 48410 - Sustainable Furniture Design For CNC Manufacturing

Note

- Departmental permission is not required to enroll in this minor.

Disclaimer

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Urban Forestry Minor

Requirements for the Minor (16 credits)

A. Required Courses (7 credits)

- FNR 44400 - Arboricultural Practices
- FNR 44500 - Urban Forest Issues
B. Selective Courses (9 credits)

- AGRY 25500 - Soil Science
- FNR 21000 - Natural Resource Information Management
- FNR 22310 - Introduction To Environmental Policy
- FNR 22500 - Dendrology
- FNR 33900 - Principles Of Silviculture
- FNR 35700 - Fundamental Remote Sensing
- FNR 35900 - Spatial Ecology And GIS
- FNR 37500 - Human Dimensions of Natural Resource Management
- FNR 43400 - Tree Physiology
- HORT 21700 - Woody Landscape Plants
- HORT 30100 - Plant Physiology
- HORT 31700 - Landscape Contracting And Management

Notes

- Departmental permission is not required to enroll in this minor.
- Other FNR 49800 or 59800 courses, with FNR approval may be used.
- For students in other FNR majors, courses required in the student's major cannot be used to meet the 8 credits of selectives for this minor.

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Wildlife Science Minor

Requirements for the Minor (17 credits)

Required Courses: (11 credits)

- FNR 24000 - Wildlife In America
- FNR 24150 - Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 24250 - Laboratory In Ecology And Systematics Of Fishes, Amphibians And Reptiles
- FNR 25150 - Ecology And Systematics Of Mammals And Birds
- FNR 25250 - Laboratory In Ecology And Systematics Of Mammals And Birds

Selective Courses: (6 credits)

- BIOL 28600 - Introduction To Ecology And Evolution
- BIOL 48300 - Great Issues: Environmental And Conservation Biology
- BIOL 58000 - Evolution
- BIOL 58500 - Ecology
- FNR 30500 - Conservation Genetics
- FNR 33300 - Fire Effects In Forest Environments
- FNR 35900 - Spatial Ecology And GIS
- FNR 44700 - Vertebrate Population Dynamics
- FNR 46500 - History And Role Of Hunting In North American Wildlife Conservation
- FNR 52700 - Ecotoxicology
- FNR 52800 - Wildlife And Environmental Forensics
- FNR 52900 - Disease Ecology
- FNR 53600 - Ecology Of Disturbance
- FNR 54300 - Conservation Biology I
- FNR 56700 - Advanced Mammalogy
- FNR 57100 - Advanced Ornithology
- FNR 59800 - Topical Problems In Forestry And Natural Resources - Advanced Herpetology

**Notes**

Departmental permission is not required to enroll in this minor.
Other FNR 49800 or 59800 courses, with FNR approval may be used.
For students in FNR majors, courses required in the student's major cannot be used to meet the 6 credits of selectives for this minor.

**Disclaimer**

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**Wood Products Manufacturing Technology Minor**

**Requirements for the Minor (18 credits)**

**Required Courses (18 credits)**

- FNR 30110 - Sustainable Forest Products Manufacturing
- FNR 31110 - Structure, Identification And Properties Of Woody Biomaterials
- FNR 41800 - Properties Of Wood Related To Manufacturing
- FNR 42500 - Secondary Wood Products Manufacturing
- TLI 11100 - Introduction To Manufacturing And Supply Chain Systems
- TLI 23500 - Introduction To Lean And Sustainable Systems

**Note**

- Departmental permission is not required to enroll in this minor.

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Department of Horticulture and Landscape Architecture

Overview

Welcome to the Department of Horticulture and Landscape Architecture at Purdue University. The mission of the Department of Horticulture and Landscape Architecture is both education and discovery. Our faculty is committed to teaching and counseling students, and enjoys a worldwide reputation for excellence in research related to horticultural crops. Our goal is to provide the student with the necessary technical information to be immediately successful in today's horticulture. Beyond that, we strive to provide students with the analytical skills necessary to interpret new information as the world of horticulture continues to change. In addition, our curricula are designed to provide you with communication skills, analytical skills and sensitivity to cultural diversity necessary for success in an increasingly global economy. Upon graduation, you will leave Purdue with a wealth of knowledge and the skills for continued life-long learning. This commitment to quality education by our faculty makes the Department of Horticulture and Landscape Architecture at Purdue University one of the first places potential employers turn for employees.

Faculty

Contact Information

Department of Horticulture & Landscape Architecture

Purdue University

Horticulture Building
625 Agriculture Mall Dr.
West Lafayette, IN 47907
Phone: (765) 494-1300
Email: hlacareers@purdue.edu

Website

The main office for the department is located in room 207 of the HORT Building.

Graduate Information

For Graduate Information please see Horticulture and Landscape Architecture Graduate Program Information.

Baccalaureate

Horticulture: Horticultural Production and Marketing Concentration, BS
About the Program

Horticultural production and marketing prepares students in the commercial production of horticultural crops and business management of horticultural enterprises. Graduates may manage greenhouses or nurseries, floral or plant shops, garden centers, orchards, vegetable farms, and farm markets. They may be involved with development, distribution, or sales of equipment, chemicals, or plant materials.

Horticulture Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (112-113 credits)

Required Major Courses (24 credits)

- HORT 10100 - Fundamentals Of Horticulture ♦
- HORT 11000 - Survey Of Horticulture
- HORT 20100 - Plant Propagation ♦
- HORT 30100 - Plant Physiology
- HORT 31800 - Field Production Of Horticultural Crops
- HORT 31900 - Controlled Environment Production Of Horticultural Crops
- HORT 42700 - Horticulture Capstone
- HORT 43500 - Principles Of Marketing And Management For Horticultural Businesses
- HORT 51300 - Nutrition Of Horticulture Crops
- HORT 54100 - Postharvest Technology Of Fruits And Vegetables

Other Departmental/Program Course Requirements (88-89 credits)

- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- AGRY 25500 - Soil Science ♦
- AGRY 32000 - Genetics
- BCHM 30700 - Biochemistry ♦
- BTNY 11000 - Introduction To Plant Science
- BTNY 30100 - Introductory Plant Pathology
- BTNY 30400 - Introductory Weed Science
- BTNY 35000 - Biotechnology In Agriculture
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- CHM 25700 - Organic Chemistry ♦
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core)
- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting (satisfies Information Literacy for core)
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation (satisfies Oral Communication for core) or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Business Selective - Credit Hours: 3.00
- Concentration Selective - Credit Hours: 3.00
- Concentration Selective - Credit Hours: 3.00
- Concentration Selective - Credit Hours: 3.00
- Entomology Selective - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- UCC Science, Technology, & Society Selective - Credit Hours: 1.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Statistics Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (7-8 credits)
- Elective - Credit Hours: 7.00-8.00

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.
College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Requirements

Click here for Horticulture: Horticultural Production & Marketing Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- HORT 10100 - Fundamentals Of Horticulture ♦
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

14 Credits

Spring 1st Year

- CHM 11200 - General Chemistry
- HORT 11000 - Survey Of Horticulture
- HORT 20100 - Plant Propagation ♦
- MA 15800 - Precalculus- Functions And Trigonometry
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing
- UCC Humanities or Social Sciences Selective - Credit Hours: 3.00

16-17 Credits
Fall 2nd Year

- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- AGRY 25500 - Soil Science ♦
- CHM 25700 - Organic Chemistry ♦
- Statistics Selective - Credit Hours: 3.00
- UCC Science, Technology, & Society Selective - Credit Hour: 1.00
- Elective - Credit Hour: 1.00

15 Credits

Spring 2nd Year

- BCHM 30700 - Biochemistry ♦
- BTNY 30100 - Introductory Plant Pathology
- HORT 30100 - Plant Physiology
- MGMT 20000 - Introductory Accounting or
- MGMT 20010 - Business Accounting
- Humanities or Social Sciences Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGRY 32000 - Genetics
- BTNY 30400 - Introductory Weed Science
- HORT 31800 - Field Production Of Horticultural Crops
- Entomology Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- AGEC 33000 - Management Methods For Agricultural Business
- BTNY 35000 - Biotechnology In Agriculture
- HORT 31900 - Controlled Environment Production Of Horticultural Crops
- Humanities or Social Science Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- HORT 43500 - Principles Of Marketing And Management For Horticultural Businesses
• Business Selective - Credit Hours: 3.00
• Concentration Selective - Credit Hours: 3.00
• Humanities or Social Sciences Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits

Spring 4th Year

• HORT 42700 - Horticulture Capstone
• HORT 51300 - Nutrition Of Horticulture Crops
• HORT 54100 - Postharvest Technology Of Fruits And Vegetables
• Concentration Selective - Credit Hours: 3.00
• Concentration Selective - Credit Hours: 3.00
• Electives - Credit Hours: 3.00-4.00

12-13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

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Horticulture: Landscape Contracting and Management Concentration, BS
About the Program

Students selecting landscape contracting and management are prepared to direct and conduct in "hands-on" fashion, the technical side of landscape construction and plant installation. Graduates of this program often operate a landscape contracting business, a design/build company or a landscape management firm, or they may work as a grounds manager.

Horticulture Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (118-119 credits)

Required Major Courses (48 credits)

- HORT 10100 - Fundamentals Of Horticulture
- HORT 11000 - Survey Of Horticulture
- HORT 20100 - Plant Propagation
- HORT 21000 - Fundamentals Of Turfgrass Culture
- HORT 21700 - Woody Landscape Plants
- HORT 21810 - Flowers For Color
- HORT 21820 - Hardy Herbaceous Landscape Plants
- HORT 30100 - Plant Physiology
- HORT 31700 - Landscape Contracting And Management
- HORT 31800 - Field Production Of Horticultural Crops
- HORT 31900 - Controlled Environment Production Of Horticultural Crops
- HORT 42700 - Horticulture Capstone
- HORT 43500 - Principles Of Marketing And Management For Horticultural Businesses
- LA 10110 - Survey Of Landscape Architecture
- LA 11600 - Graphic Communication For Students Of Landscape Architects And Design
- LA 16100 - Land And Society
- LA 21600 - Landscape Architectural Design I
- LA 24600 - Site Systems I

Other Departmental /Program Course Requirements (70-71 credits)

- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- AGRY 25500 - Soil Science
- AGRY 32000 - Genetics
- ASM 21600 - Introduction To Surveying
- BTNY 11000 - Introduction To Plant Science
• BTNY 30100 - Introductory Plant Pathology
• BTNY 30400 - Introductory Weed Science
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• CHM 25700 - Organic Chemistry ♦
• ENTM 20600 - General Entomology
• ENTM 20700 - General Entomology Laboratory
• SPAN 10100 - Spanish Level I (UCC Humanities Selective (satisfies Human Cultures Humanities for core)
• SPAN 10200 - Spanish Level II (Humanities or Social Science Selective)
• MA 15800 - Precalculus- Functions And Trigonometry
• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing
• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Statistics Selective - Credit Hours: 3.00
• Supervision/Personnel Selective - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• Entomology Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00

Electives (1-2 credits)

Elective - Credit Hours: 1.00-2.00

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.
College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Requirements

Click here for Horticulture: Landscape Contracting & Management Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- HORT 10100 - Fundamentals Of Horticulture ♦
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

14 Credits

Spring 1st Year

- CHM 11200 - General Chemistry
- HORT 11000 - Survey Of Horticulture
- HORT 20100 - Plant Propagation ♦
- MA 15800 - Precalculus- Functions And Trigonometry
- SPAN 10100 - Spanish Level I
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

16-17 Credits

Fall 2nd Year
- CHM 25700 - Organic Chemistry ♦
- HORT 21700 - Woody Landscape Plants
- LA 10110 - Survey Of Landscape Architecture
- LA 11600 - Graphic Communication For Students Of Landscape Architects And Design
- LA 16100 - Land And Society
- SPAN 10200 - Spanish Level II

17 Credits

Spring 2nd Year

- AGRY 25500 - Soil Science ♦
- ASM 21600 - Introduction To Surveying
- HORT 30100 - Plant Physiology
- LA 21600 - Landscape Architectural Design I
- Economics Selective - Credit Hours: 3.00

14 Credits

Fall 3rd Year

- AGEC 33000 - Management Methods For Agricultural Business
- BTNY 30100 - Introductory Plant Pathology
- HORT 21000 - Fundamentals Of Turfgrass Culture
- HORT 21810 - Flowers For Color
- HORT 21820 - Hardy Herbaceous Landscape Plants
- LA 24600 - Site Systems I

16 Credits

Spring 3rd Year

- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGRY 32000 - Genetics
- ENTM 20600 - General Entomology
- ENTM 20700 - General Entomology Laboratory
- HORT 31900 - Controlled Environment Production Of Horticultural Crops
- Statistics Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- BTNY 30400 - Introductory Weed Science
- HORT 31700 - Landscape Contracting And Management
- HORT 31800 - Field Production Of Horticultural Crops
• HORT 43500 - Principles Of Marketing And Management For Horticultural Businesses
• Humanities or Social Science - Credit Hours: 3.00

16 Credits

Spring 4th Year

• HORT 42700 - Horticulture Capstone
  • Humanities or Social Science (30000+ level) Selective - Credit Hours: 3.00
  • Supervision/Personnel Selective - Credit Hours: 3.00
  • Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
  • Elective - Credit Hours: 1.00 - 2.00

11-12 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

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Horticulture: Landscape Design Concentration, BS

About the Program

Graduates in Landscape Design will be ready to create planting plans and construction site plans for landscape and garden development. They will be able to work with clients to determine requirements and oversee installation of new landscapes, especially at the small commercial/institutional and residential scales.
Horticulture Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (117-118 credits)

Required Major Courses (51 credits)

- HORT 10100 - Fundamentals Of Horticulture ♦
- HORT 11000 - Survey Of Horticulture
- HORT 20100 - Plant Propagation ●
- HORT 21700 - Woody Landscape Plants
- HORT 21810 - Flowers For Color
- HORT 21820 - Hardy Herbaceous Landscape Plants
- HORT 30100 - Plant Physiology
- HORT 31700 - Landscape Contracting And Management
- HORT 31800 - Field Production Of Horticultural Crops
- HORT 31900 - Controlled Environment Production Of Horticultural Crops
- HORT 42700 - Horticulture Capstone
- HORT 43500 - Principles Of Marketing And Management For Horticultural Businesses
- LA 10110 - Survey Of Landscape Architecture
- LA 11600 - Graphic Communication For Students Of Landscape Architects And Design
- LA 16100 - Land And Society
- LA 21600 - Landscape Architectural Design I
- LA 22700 - Planting Design I
- LA 24600 - Site Systems I
- LA 32500 - Planting Design II

Other Departmental/Program Course Requirements (66-67 credits)

- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- AGRY 25500 - Soil Science ♦
- AGRY 32000 - Genetics
- BTNY 11000 - Introduction To Plant Science
- BTNY 30100 - Introductory Plant Pathology
- CHM 11100 - General Chemistry (satisfied Science #1 for core)
- CHM 11200 - General Chemistry (satisfied Science #2 for core)
- CHM 25700 - Organic Chemistry ♦
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core)

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core)
  or
- ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Entomology Selective - Credit Hours: 3.00
• Statistics Selective - Credit Hours: 3.00
• Supervision/Personnel Selective - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core)- Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (2-3 credits)

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Requirements

Click here for Horticulture: Landscape Design Suplemental Information
Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- HORT 10100 - Fundamentals Of Horticulture ♦

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

14 Credits

Spring 1st Year

- CHM 11200 - General Chemistry
- HORT 11000 - Survey Of Horticulture
- HORT 20100 - Plant Propagation ♦

- ENGL 10600 - First-Year Composition or
- MA 15800 - Precalculus- Functions And Trigonometry

- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

16-17 Credits

Fall 2nd Year

- CHM 25700 - Organic Chemistry ♦
- HORT 21700 - Woody Landscape Plants
- LA 11600 - Graphic Communication For Students Of Landscape Architects And Design
- LA 16100 - Land And Society
- LA 10110 - Survey Of Landscape Architecture

14 Credits

Spring 2nd Year

- AGRY 25500 - Soil Science ♦
- HORT 30100 - Plant Physiology
- LA 21600 - Landscape Architectural Design I
- Economics Selective - Credit Hours: 3.00
• Humanities or Social Sciences Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

• AGEC 33000 - Management Methods For Agricultural Business
• HORT 21810 - Flowers For Color
• HORT 21820 - Hardy Herbaceous Landscape Plants
• LA 24600 - Site Systems I
• Entomology Selective - Credit Hours: 3.00
• Humanities or Social Sciences Selective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

• AGEC 33100 - Principles Of Selling In Agricultural Business
• AGRY 32000 - Genetics
• BTNY 30100 - Introductory Plant Pathology
• LA 22700 - Planting Design I
• Statistics Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

• HORT 31700 - Landscape Contracting And Management
• HORT 31800 - Field Production Of Horticultural Crops
• HORT 43500 - Principles Of Marketing And Management For Horticultural Businesses
• LA 32500 - Planting Design II
• Written or Oral Communication (20000+ level) - Credit Hours: 3.00

16 Credits

Spring 4th Year

• HORT 31900 - Controlled Environment Production Of Horticultural Crops
• HORT 42700 - Horticulture Capstone
• Humanities or Social Science Selective (30000+ level - Credit Hours: 3.00
• Supervision/Personnel Selective - Credit Hours: 3.00
• Elective - Credit Hours: 1.00 - 3.00

12-13 Credits

Notes
2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Horticulture: Landscape Enterprise Management Concentration, BS

About the Program

In addition to their science-based landscape horticultural skills, students selecting landscape enterprise management are prepared to become account managers in client relations, business managers, as well as supervisors for landscape installation projects and landscape management.

Horticulture Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (113-114 credits)

Required Major Courses (35 credits)

- HORT 10100 - Fundamentals Of Horticulture ♦
- HORT 11000 - Survey Of Horticulture
- HORT 20100 - Plant Propagation ♦
- HORT 21700 - Woody Landscape Plants
• HORT 21810 - Flowers For Color
• HORT 21820 - Hardy Herbaceous Landscape Plants
• HORT 30100 - Plant Physiology
• HORT 31700 - Landscape Contracting And Management
• HORT 31800 - Field Production Of Horticultural Crops
• HORT 31900 - Controlled Environment Production Of Horticultural Crops
• HORT 42700 - Horticulture Capstone
• HORT 43500 - Principles Of Marketing And Management For Horticultural Businesses
• LA 10110 - Survey Of Landscape Architecture
• LA 16100 - Land And Society (satisfies Science, Technology & Society Selective for core)

Other Departmental/Program Course Requirements (78-79 credits)

• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness (satisfies Human Culture Behavioral/Social Science for core)
• AGEC 33000 - Management Methods For Agricultural Business
• AGEC 33100 - Principles Of Selling In Agricultural Business
• AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
• AGRY 25500 - Soil Science ♦
• AGRY 32000 - Genetics
• BTNY 11000 - Introduction To Plant Science
• BTNY 30100 - Introductory Plant Pathology
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• CHM 25700 - Organic Chemistry ♦
• MGMT 20010 - Business Accounting
• MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core)

or

• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core)
• ENGL 10800 - Accelerated First-Year Composition
• HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core)
• COM 21700 - Science Writing And Presentation
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Entomology Selective - Credit Hours: 3.00
• Statistics Selective (satisfies Information Literacy for core) - Credit Hours: 3.00
• Business/Supervision/Personnel Selective - Credit Hours: 3.00
• Business/Supervision/Personnel Selective - Credit Hours: 3.00
• Business/Supervision/Personnel Selective - Credit Hours: 3.00
• Business/Supervision/Personnel Selective - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core)- Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
Electives (6-7 credits)

- Elective - Credit Hours: 6.00-7.00

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Requirements

Click here for Horticulture: Landscape Enterprise Management Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- HORT 10100 - Fundamentals Of Horticulture ♦
- COM 11400 - Fundamentals Of Speech Communication ♦ or
- COM 21700 - Science Writing And Presentation ♦ or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

14 Credits

Spring 1st Year

• CHM 11200 - General Chemistry
• HORT 11000 - Survey Of Horticulture
• HORT 20100 - Plant Propagation
• MA 15800 - Precalculus- Functions And Trigonometry

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

• UCC Humanities Selective - Credit Hours: 3.00

16-17 Credits

Fall 2nd Year

• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
• CHM 25700 - Organic Chemistry
• HORT 21700 - Woody Landscape Plants
• LA 10110 - Survey Of Landscape Architecture
• LA 16100 - Land And Society
• Elective: 2.00

16 Credits

Spring 2nd Year

• AGEC 33000 - Management Methods For Agricultural Business
• AGRY 25500 - Soil Science
• HORT 30100 - Plant Physiology
• Business/Supervision/Personnel Selective - Credit Hours: 3.00
• Humanities or Social Sciences Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

• AGEC 33100 - Principles Of Selling In Agricultural Business
• BTNY 30100 - Introductory Plant Pathology
• HORT 21810 - Flowers For Color
• HORT 21820 - Hardy Herbaceous Landscape Plants
• Business/Supervision/Personnel Selective - Credit Hours: 3.00
- Entomology Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- AGRY 32000 - Genetics
- HORT 31900 - Controlled Environment Production Of Horticultural Crops
- MGMT 20010 - Business Accounting
- Statistics Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00-3.00

14-15 Credits

Fall 4th Year

- HORT 31700 - Landscape Contracting And Management
- HORT 31800 - Field Production Of Horticultural Crops
- HORT 43500 - Principles Of Marketing And Management For Horticultural Businesses
- Humanities or Social Sciences Selective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

15 Credits

Spring 4th Year

- HORT 42700 - Horticulture Capstone
- Business/Supervision/Personnel Selective - Credit Hours: 3.00
- Business/Supervision/Personnel Selective - Credit Hours: 3.00
- Humanities or Social Science Selective(30000+ level) - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish
Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Horticulture: Plant Science Concentration, BS

About the Program

Plant Science includes training to improve plants through genetic manipulation and to investigate new methods of propagation, growth, handling, and marketing of horticultural crops. Horticultural scientists work at colleges and universities, state and federal experiment stations, and public or private laboratories and foundations. This curriculum prepares students for scientifically oriented careers such as technicians in plant breeding, propagation, and research industries. It is an excellent preparatory program for students planning to pursue post-graduate study toward a Masters or PhD degree.

Horticulture Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (113-114 credits)

Required Major Courses (23 credits)

- HORT 10100 - Fundamentals Of Horticulture ♦
- HORT 12100 - Medicine In The Garden
- HORT 20100 - Plant Propagation ♦
- HORT 30100 - Plant Physiology
- HORT 31800 - Field Production Of Horticultural Crops
- HORT 31900 - Controlled Environment Production Of Horticultural Crops
- HORT 42700 - Horticulture Capstone
- HORT 49100 - Special Assignments In Horticulture
- HORT 51300 - Nutrition Of Horticulture Crops
- HORT 54100 - Postharvest Technology Of Fruits And Vegetables

Other Departmental/Program Course Requirements (87-88 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
• AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
• AGRY 25500 - Soil Science
• AGRY 32000 - Genetics
• AGRY 32100 - Genetics Laboratory
• BCHM 30700 - Biochemistry
• BTNY 11000 - Introduction To Plant Science
• BTNY 30100 - Introductory Plant Pathology
• BTNY 30200 - Plant Ecology
• BTNY 30500 - Fundamentals Of Plant Classification
• BTNY 31600 - Plant Anatomy
• CHM 11100 - General Chemistry (satisfies Science #1 for core)
• CHM 11200 - General Chemistry (satisfies Science #2 for core)
• CHM 25700 - Organic Chemistry
• CHM 25701 - Organic Chemistry Laboratory
• MA 16010 - Applied Calculus I (satisfies Quantitative Reasoning for core)
• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core)
or
• ENGL 10800 - Accelerated First-Year Composition
• HONR 19903 - Interdisciplinary Approaches In Writing
• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Physics Selective - Credit Hours: 3.00
• Statistics Selective - Credit Hours: 3.00
• Concentration Selective - Credit Hours: 3.00
• Concentration Selective - Credit Hours: 3.00
• Concentration Selective - Credit Hours: 3.00
• Concentration Selective - Credit Hours: 3.00
• Concentration Selective - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• Entomology Selective - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level)- Credit Hours: 3.00

Electives (9-10 credits)

• Elective - Credit Hours: 9.00-10.00

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Requirements

Click here for Horticulture: Plant Science Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry ♦
- HORT 12100 - Medicine In The Garden
- MA 16010 - Applied Calculus I

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

15 Credits

Spring 1st Year

- CHM 11200 - General Chemistry ♦
- HORT 10100 - Fundamentals Of Horticulture
ENGL 10600 - First-Year Composition or
ENGL 10800 - Accelerated First-Year Composition or
HONR 19903 - Interdisciplinary Approaches In Writing

- Economics Selective - Credit Hours: 3.00
- Elective - Credit Hour: 3.00

15-16 Credits

Fall 2nd Year

- AGRY 25500 - Soil Science
- BTNY 31600 - Plant Anatomy
- CHM 25700 - Organic Chemistry ♦
- CHM 25701 - Organic Chemistry Laboratory
- UCC Humanities Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- BCHM 30700 - Biochemistry ♦
- BTNY 30200 - Plant Ecology
- HORT 20100 - Plant Propagation ♦
- HORT 30100 - Plant Physiology
- Elective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

- AGRY 32000 - Genetics
- AGRY 32100 - Genetics Laboratory
- BTNY 30100 - Introductory Plant Pathology
- BTNY 30500 - Fundamentals Of Plant Classification
- HORT 31800 - Field Production Of Horticultural Crops
- Humanities or Social Science Selective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- HORT 31900 - Controlled Environment Production Of Horticultural Crops
- Concentration Selective - Credit Hours: 3.00
- Humanities or Social Sciences Selective - Credit Hours: 3.00
- Physics Selective - Credit Hours: 3.00
• Statistics Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

• HORT 49100 - Special Assignments In Horticulture
• Concentration Selective - Credit Hours: 3.00
• Concentration Selective - Credit Hours: 3.00
• Humanities or Social Sciences Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level)- Credit Hours: 3.00

15 Credits

Spring 4th Year

• HORT 42700 - Horticulture Capstone
• HORT 51300 - Nutrition Of Horticulture Crops
• HORT 54100 - Postharvest Technology Of Fruits And Vegetables
• Concentration Selective - Credit Hours: 3.00
• Concentration Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00-4.00

12-13 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.
Horticulture: Public Horticulture Concentration, BS

About the Program

Public horticulture is a professional program leading to employment in botanical gardens, arboretums and other horticultural establishments serving the public. Graduates work as curators of plant collections, educators, plant propagators, illustrators, and writers. Practical training through internships in public gardens is stressed.

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (37 credits)

Required Major Courses (37 credits)

- HORT 10100 - Fundamentals Of Horticulture
- HORT 11000 - Survey Of Horticulture
- HORT 20100 - Plant Propagation
- HORT 21700 - Woody Landscape Plants
- HORT 21810 - Flowers For Color
- HORT 21820 - Hardy Herbaceous Landscape Plants
- HORT 30100 - Plant Physiology
- HORT 30600 - History Of Horticulture
- HORT 31700 - Landscape Contracting And Management
- HORT 31800 - Field Production Of Horticultural Crops
- HORT 31900 - Controlled Environment Production Of Horticultural Crops
- HORT 42700 - Horticulture Capstone
- LA 10110 - Survey Of Landscape Architecture
- LA 16100 - Land And Society
- LA 16600 - History And Theory Of Landscape Architecture

Other Departmental /Program Course Requirements (75-76 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- AGRY 25500 - Soil Science
- AGRY 32000 - Genetics
- BCHM 30700 - Biochemistry
- BTNY 11000 - Introduction To Plant Science
- BTNY 30100 - Introductory Plant Pathology
- BTNY 30200 - Plant Ecology
- BTNY 30500 - Fundamentals Of Plant Classification
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- CHM 25700 - Organic Chemistry
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core)

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) 
or
- ENGL 10800 - Accelerated First-Year Composition 
or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) 
or
- COM 21700 - Science Writing And Presentation 
or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Entomology Selective - Credit Hours: 3.00
- Statistics Selective (satisfies Information Literacy for core) - Credit Hours: 3.00
- Communications Selective - Credit Hours: 3.00
- Concentration Selective - Credit Hours: 3.00
- Concentration Selective - Credit Hours: 3.00
- Supervision/Personnel Selective - Credit Hours: 3.00
- Economics Selective - Credit Hours: 3.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level)- Credit Hours: 3.00

Electives (7-8 credits)

- Elective - Credit Hours: 7.00-8.00

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.
College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

Additional Requirements

Click here for Horticulture: Public Horticulture Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- HORT 10100 - Fundamentals Of Horticulture ♦

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

14 Credits

Spring 1st Year

- CHM 11200 - General Chemistry
- HORT 11000 - Survey Of Horticulture
- HORT 20100 - Plant Propagation ♦
- MA 15800 - Precalculus- Functions And Trigonometry

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- UCC Humanities Selective - Credit Hours: 3.00

16-17 Credits

Fall 2nd Year

- AGRY 25500 - Soil Science ♦
- CHM 25700 - Organic Chemistry ♦
• HORT 21700 - Woody Landscape Plants
• LA 10110 - Survey Of Landscape Architecture
• LA 16100 - Land And Society
• Elective - Credit Hours: 1.00

15 Credits

Spring 2nd Year

• BCHM 30700 - Biochemistry ♦
• BTNY 30100 - Introductory Plant Pathology
• HORT 30100 - Plant Physiology
• LA 16600 - History And Theory Of Landscape Architecture
• Economics Selective - Credit Hours: 3.00

16 Credits

Fall 3rd Year

• AGRY 32000 - Genetics
• BTNY 30500 - Fundamentals Of Plant Classification
• HORT 21810 - Flowers For Color
• HORT 21820 - Hardy Herbaceous Landscape Plants
• Entomology Selective - Credit Hours: 3.00
• Statistics Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

• BTNY 30200 - Plant Ecology
• HORT 31900 - Controlled Environment Production Of Horticultural Crops
• Concentration Selective - Credit Hours: 3.00
• Humanities or Social Sciences Selective - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

• HORT 30600 - History Of Horticulture
• HORT 31700 - Landscape Contracting And Management
• HORT 31800 - Field Production Of Horticultural Crops
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00
• Elective - Credit Hours: 2.00
14 Credits

Spring 4th Year

- HORT 42700 - Horticulture Capstone
- Communication Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Supervision/Personnel Selective - Credit Hours: 3.00
- Concentration Selective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00-2.00

14-15 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Landscape Architecture, BSLA

About the Program

Landscape architecture allows students to develop abilities in problem solving, analytical thinking, and communication. Three fundamental tracks run through the curriculum - design, technical, and plant materials. First-year students enter the pre-landscape architecture program and learn basic art, graphic communication, and design skills. Based on performance in their first year, qualified students are admitted into the professional landscape architecture program. In their second year, increasingly challenging projects allow students to apply their knowledge. Third-year students complete larger-scale projects and focus on
more diverse and technically difficult concepts. Between the third and fourth years, students complete a co-op program wherein students are placed in professional offices nationwide for a minimum of forty weeks. Fourth year students focus on "real-client" projects in urban and regional design.

Landscape Architecture Website

Degree Requirements

120 Credits Required

Required Major Courses (60 credits)

- LA 10110 - Survey Of Landscape Architecture
- LA 11600 - Graphic Communication For Students Of Landscape Architects And Design ♦
- LA 11700 - Computer Technology In Design
- LA 16100 - Land And Society (satisfies Science, Technology & Society Selective for core)
- LA 16600 - History And Theory Of Landscape Architecture
- LA 21600 - Landscape Architectural Design I ♦
- LA 22600 - Landscape Architectural Design II ♦
- LA 22700 - Planting Design I ♦
- LA 24600 - Site Systems I ♦
- LA 25000 - Architectural Design
- LA 30900 - Co-Op Preparation
- LA 31600 - Landscape Architectural Design III
- LA 32500 - Planting Design II
- LA 32600 - Landscape Architectural Design IV
- LA 34600 - Site Systems II
- LA 35600 - Site Systems III
- LA 39000 - Professional Cooperative Programs In Landscape Architecture
- LA 41600 - Landscape Architectural Design V
- LA 42600 - Capstone Course In Landscape Architecture
- LA 47600 - Professional Practice Of Landscape Architecture

Other Departmental /Program Course Requirements (53-54 credits)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- ASM 21600 - Introduction To Surveying
- BIOL 11000 - Fundamentals Of Biology I
- HORT 21700 - Woody Landscape Plants
- HORT 31700 - Landscape Contracting And Management
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)
- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science
• ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
  • ENGL 10800 - Accelerated First-Year Composition
  • HONR 19903 - Interdisciplinary Approaches In Writing

• COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
  • COM 21700 - Science Writing And Presentation or
  • EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• AGRY 12500 - Environmental Science And Conservation or
  • EAPS 12500 - Environmental Science And Conservation or
  • FNR 12500 - Environmental Science And Conservation or
  • NRES 12500 - Environmental Science And Conservation

• Art & Design Selective - Credit Hours: 3.00
• Art & Design Selective - Credit Hours: 3.00
• Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
• Mathematics or Sciences Selective - Credit Hours: 3.00
• UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Written or Oral Communications Selection (20000+ level)- Credit Hours: 3.0

Electives (6-7 credits)

• Elective - Credit Hours:6.00-7.00

College of Agriculture & University Level Requirements

• 2.0 GPA required for Bachelor of Science degree
• 32 Upper division credits taken from Purdue
• 9 credits International Understanding
• 3 credits Multicultural Awareness
• 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

• Human Cultures Humanities
• Human Cultures Behavioral/Social Science
• Information Literacy
• Science #1
• Science #2
• Science, Technology, and Society
• Written Communication
• Oral Communication
• Quantitative Reasoning
  For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:
Additional Requirements

Click here for Landscape Architecture Supplemental Information

Program Requirements

Fall 1st Year (Pre-Program)

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- LA 10110 - Survey Of Landscape Architecture
- LA 11600 - Graphic Communication For Students Of Landscape Architects And Design ♦
- LA 16100 - Land And Society

- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 1st Year (Pre-Program)

- LA 21600 - Landscape Architectural Design I ♦
- MA 15800 - Precalculus- Functions And Trigonometry

- BIOL 11100 - Fundamentals Of Biology II or
- BTNY 11000 - Introduction To Plant Science

- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Art and Design Selective - Credit Hours: 3.00

16 Credits

Fall 2nd Year

- AGRY 12500 - Environmental Science And Conservation or
- EAPS 12500 - Environmental Science And Conservation or
- FNR 12500 - Environmental Science And Conservation or
- NRES 12500 - Environmental Science And Conservation
- HORT 21700 - Woody Landscape Plants
• LA 11700 - Computer Technology In Design
• LA 24600 - Site Systems I
• Elective - Credit Hours: 1.00

15 Credits

Spring 2nd Year

• ASM 21600 - Introduction To Surveying
• LA 16600 - History And Theory Of Landscape Architecture
• LA 22600 - Landscape Architectural Design II
• LA 22700 - Planting Design I
• Art & Design Selective - Credit Hours: 3.00
• Elective - Credit Hours: 1.00

15 Credits

Fall 3rd Year

• HORT 31700 - Landscape Contracting And Management
• LA 30900 - Co-Op Preparation
• LA 31600 - Landscape Architectural Design III
• LA 32500 - Planting Design II
• LA 34600 - Site Systems II

14 Credits

Spring 3rd Year

• LA 25000 - Architectural Design
• LA 32600 - Landscape Architectural Design IV
• LA 35600 - Site Systems III
• Economics Selective - Credit Hours: 3.00
• Elective - Credit Hours: 2.00

16 Credits

Fall & Spring 4th Year

• LA 39000 - Professional Cooperative Programs In Landscape Architecture

Fall 5th Year

• LA 41600 - Landscape Architectural Design V
• LA 47600 - Professional Practice Of Landscape Architecture
• Humanities or Social Sciences Selective (30000+ level) - Credit Hours: 3.00
15-16 Credits

Spring 5th Year

- LA 42600 - Capstone Course In Landscape Architecture
- Humanities or Social Sciences Selective - Credit Hours: 3.00
- UCC Humanities Selective - Credit Hours: 3.00
- Mathematics or Sciences Selective - Credit Hours: 3.00

14 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

** Students in Landscape Architecture fulfill the foundational mathematics requirement by (1) completing MA 15800 or higher or (2) completing STAT 30100. Enrolling in STAT 30100 requires either successfully completing MA 15300 and MA 15400 or taking the advanced credit examination for MA 15300 and MA 15400 to establish competency. Three (3) credits of MA 15300 or MA 15400 may be used as an unrestricted elective in the College of Agriculture Undergraduate plans of study, but may not be used as Mathematics and Sciences selective.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

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Sustainable Food and Farming Systems, BS

Overview
Learn how to design and manage a small farm enterprise. Study the principles of sustainable agriculture including non-chemical pest and soil management. Investigate organic, local, and urban agriculture systems and study the resilience of the American food system. Gain hands-on experience at the new Purdue University student farm. This is a comprehensive, science-based degree program that will prepare you to manage low-input farming enterprises and for a career in many other agricultural and environmental professional fields.

Sustainable Food and Farming Systems Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (113-115 credits)

Required Major Courses (13 credits)

- SFS 21000 - Small Farm Experience I ♦
- SFS 21100 - Small Farm Experience II ♦
- SFS 30100 - Agroecology
- SFS 30200 - Principles Of Sustainability
- SFS 35100 - SFS Capstone Project

Other Departmental/Program Course Requirements (100-102 credits)

- AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- AGRY 32000 - Genetics
- ANSC 10200 - Introduction To Animal Agriculture
- BIOL 11000 - Fundamentals Of Biology I
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning for core)
- STAT 30100 - Elementary Statistical Methods

- AGRY 10500 - Crop Production or
- HORT 10100 - Fundamentals Of Horticulture

- AGRY 25500 - Soil Science ♦ or
- AGRY 27000 - Forest Soils

- ANSC 23000 - Physiology Of Domestic Animals or
- HORT 30100 - Plant Physiology

- BTNY 20700 - The Microbial World or
- BIOL 22100 - Introduction To Microbiology
- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) (satisfies Information Literacy for core) or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

- Agronomoy/Horticulture Selective - Credit Hours: 3.00
- Animal Science Selective - Credit Hours: 3.00
- Business Management Selective - Credit Hours: 3.00
- Ecology/Environment Selective - Credit Hours: 6.00
- Food Science Selective - Credit Hours: 3.00
- Pest Management Selectives - Credit Hours: 6.00
- Soil Science Selective - Credit Hours: 3.00
- Systems Modules Selectives - Credit Hours: 6.00
- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- UCC Humanites Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

Electives (5-7 credits)

- Elective - Credit Hours: 5.00 - 7.00

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.
Prerequisite Information:

For current pre-requisites for courses, click here.

Additional Requirements

Click here for Sustainable Food & Farming Systems Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
- CHM 11100 - General Chemistry
- MA 15800 - Precalculus- Functions And Trigonometry
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

14 Credits

Spring 1st Year

- BTNY 11000 - Introduction To Plant Science
- CHM 11200 - General Chemistry
- SFS 21000 - Small Farm Experience I ♦
- AGRY 10500 - Crop Production or
- HORT 10100 - Fundamentals Of Horticulture
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

16-17 Credits

Fall 2nd Year

- ANSC 10200 - Introduction To Animal Agriculture
- SFS 21100 - Small Farm Experience II ♦
- SFS 30100 - Agroecology
- Agronomy/Horticulture Selective - Credit Hours: 3.00
• Systems Modules Selective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

• AGEC 20300 - Introductory Microeconomics For Food And Agribusiness
• SFS 30200 - Principles Of Sustainability

• AGRY 25500 - Soil Science ♦ or
• AGRY 27000 - Forest Soils

• BTNY 20700 - The Microbial World or
• BIOL 22100 - Introduction To Microbiology

• Systems Modules Selective - Credit Hours: 3.00

15-16 Credits

Fall 3rd Year

• ANSC 23000 - Physiology Of Domestic Animals or
• HORT 30100 - Plant Physiology

• Pest Management Selective - Credit Hours: 3.00
• Soil Science Selective - Credit Hours: 3.00
• UCC Humanities Selective - Credit Hours: 3.00
• Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits

Spring 3rd Year

• AGRY 32000 - Genetics
• STAT 30100 - Elementary Statistical Methods
• Animal Science Selective - Credit Hours: 3.00
• Pest Management Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

• SFS 35100 - SFS Capstone Project
• Business Management Selective - Credit Hours: 3.00
• Economics Selective - Credit Hours: 3.00
• Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
• Elective - Credit Hours: 3.00

13 Credits

Spring 4th Year

• Ecology/Environment Selectives - Credit Hours: 6.00
• Food Science Selective - Credit Hours: 3.00
• Humanities or Social Science Selective - Credit Hours: 3.00
• Elective - Credit Hours: 2.00 - 4.00

14-16 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

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Turf Management and Science, BS

About the Program

This major is for students interested in a career as a professional turf manager. A turf manager oversees and implements cultural management programs for the maintenance, production, conditioning and performance of a wide variety of turf areas like lawns, athletic fields, golf courses, parks, and sod farms. Managing a visually pleasing and manicured turf that is subject to intense use requires a foundation of technical expertise, the ability to make precise management decisions and a wealth of practical experience. The Turf Science and Management curriculum is based in scientific principles, while also providing the technical
information, business/management, written/oral communication, and problem solving coursework and skills to promote managerial success. This Bachelor of Science degree broadly prepares students to handle a wide array of potential career paths in the Turf Industry.

Turf Management and Science Website

Degree Requirements

120 Credits Required

Departmental/Program Major Courses (113-114 credits)

Required Major Courses (19 credits)

- HORT 10100 - Fundamentals Of Horticulture
- HORT 11100 - Survey Of Turfgrass Culture
- HORT 21000 - Fundamentals Of Turfgrass Culture
- HORT 21100 - Fundamentals of Turfgrass Culture Laboratory
- HORT 30100 - Plant Physiology
- AGRY 51000 - Turfgrass Science
- AGRY 51200 - Integrated Turfgrass Systems
- AGRY 51400 - Environmental Stress Management For Turfgrass or
- HORT 51300 - Nutrition Of Horticulture Crops

Other Departmental /Program Course Requirements (94-95 credits)

- AGEC 33000 - Management Methods For Agricultural Business
- AGEC 33100 - Principles Of Selling In Agricultural Business
- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- AGRY 25500 - Soil Science
- AGRY 36500 - Soil Fertility
- BTNY 11000 - Introduction To Plant Science
- BTNY 30100 - Introductory Plant Pathology
- BTNY 30400 - Introductory Weed Science
- CHM 11100 - General Chemistry (satisfies Science #1 for core)
- CHM 11200 - General Chemistry (satisfies Science #2 for core)
- CHM 25700 - Organic Chemistry
- ENTM 41000 - Applied Insect Biology
- ENTM 41001 - Insects Of Urban Landscapes
- MA 15800 - Precalculus- Functions And Trigonometry (satisfies Quantitative Reasoning Selective for core)
- STAT 30100 - Elementary Statistical Methods (satisfies Information Literacy for core)

- MGMT 20010 - Business Accounting or
- MGMT 20000 - Introductory Accounting

- ENGL 10600 - First-Year Composition (satisfies Written Communication for core) or
- ENGL 10800 - Accelerated First-Year Composition
- HONR 19903 - Interdisciplinary Approaches In Writing

- COM 11400 - Fundamentals Of Speech Communication (satisfies Oral Communication for core) or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills

Business/Management Selectives - Credit Hours: 9.00
- Economics Selective (satisfies Human Culture Behavioral/Social Science for core) - Credit Hours: 3.00
- Physics Selective - Credit Hours: 3.00
- Turf Science Selectives - Credit hours: 12.00
- UCC Humanities Selective (satisfies Human Cultures Humanities for core) - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective - Credit Hours: 3.00
- Humanities or Social Science Selective (30000+ level) - Credit Hours: 3.00
- UCC STS Selective (satisfies Science, Technology & Society Selective for core) - Credit Hours: 1.00
- Written or Oral Communications Selective (20000+ level)- Credit Hours: 3.00

Electives (6-7 credits)

- Elective - Credit Hours: 6.00-7.00

College of Agriculture & University Level Requirements

- 2.0 GPA required for Bachelor of Science degree
- 32 Upper division credits taken from Purdue
- 9 credits International Understanding
- 3 credits Multicultural Awareness
- 9 credits of Hum and/or Social Sciences outside the College of Agriculture

University Core Requirements

- Human Cultures Humanities
- Human Cultures Behavioral/Social Science
- Information Literacy
- Science #1
- Science #2
- Science, Technology, and Society
- Written Communication
- Oral Communication
- Quantitative Reasoning

For a complete listing of course selectives, visit the Provost's Website.

Prerequisite Information:

For current pre-requisites for courses, click here.
Additional Requirements

Click here for Turf Management and Science Supplemental Information

Program Requirements

Fall 1st Year

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- BTNY 11000 - Introduction To Plant Science
- CHM 11100 - General Chemistry
- HORT 11100 - Survey Of Turfgrass Culture
- MA 15800 - Precalculus- Functions And Trigonometry
- ENGL 10600 - First-Year Composition or
- ENGL 10800 - Accelerated First-Year Composition or
- HONR 19903 - Interdisciplinary Approaches In Writing

15-16 Credits

Spring 1st Year

- HORT 10100 - Fundamentals Of Horticulture
- CHM 11200 - General Chemistry
- COM 11400 - Fundamentals Of Speech Communication or
- COM 21700 - Science Writing And Presentation or
- EDPS 31500 - Collaborative Leadership: Interpersonal Skills
- Economics Selective - Credit Hours: 3.00
- UCC Humanities Selective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

- AGRY 25500 - Soil Science ♦
- CHM 25700 - Organic Chemistry ♦
- STAT 30100 - Elementary Statistical Methods
- MGMT 20010 - Business Accounting or
- MGMT 20000 - Introductory Accounting
- Written or Oral Communication Selective (20000+ level) - Credit Hours: 3.00

16 Credits
Spring 2nd Year

- AGRY 36500 - Soil Fertility
- BTNY 30100 - Introductory Plant Pathology
- HORT 21000 - Fundamentals Of Turfgrass Culture
- HORT 21100 - Fundamentals of Turfgrass Culture Laboratory
- HORT 30100 - Plant Physiology

14 Credits

Fall 3rd Year

- AGEC 33000 - Management Methods For Agricultural Business
- AGRY 51000 - Turfgrass Science
- BTNY 30400 - Introductory Weed Science
- ENTM 41000 - Applied Insect Biology
- ENTM 41001 - Insects Of Urban Landscapes
- Humanities or Social Sciences Selective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- AGEC 33100 - Principles Of Selling In Agricultural Business
- Physics Selective - Credit Hours: 3.00
- Turf Management Selective - Credit Hours: 3.00
- Turf Management Selective - Credit Hours: 3.00
- Humanities or Social Sciences Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- AGRY 51200 - Integrated Turfgrass Systems
- AGRY 51400 - Environmental Stress Management For Turfgrass or
  - HORT 51300 - Nutrition Of Horticulture Crops
- Business/Management Selective - Credit Hours: 3.00
- Humanities or Social Sciences Selective (30000+ level) - Credit Hours: 3.00
- Turf Management Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 4th Year
- Business/Management Selective - Credit Hours: 3.00
- Business/Management Selective - Credit Hours: 3.00
- Turf Management Selective - Credit Hours: 3.00
- UCC Science, Technology & Society Selective - Credit Hours: 1.00
- Electives - Credit Hours: 3.00-4.00

13-14 Credits

Notes

2.0 GPA required for Bachelor of Science degree.

Consultation with an advisor may result in an altered plan customized for an individual student.

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

Foreign Language Courses

Foreign Language proficiency requirements vary by program.

For acceptable languages and proficiency levels, see your advisor: American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Disclaimer

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Certificate

Landscape Management and Turf Management Certificate

Requirements for the Certificate (23 credits)

Required Courses (23 credits)

- AGRY 25500 - Soil Science
- CHM 11100 - General Chemistry
- HORT 10100 - Fundamentals Of Horticulture
Notes

Required Certification in Pesticide Application: Complete certification requirement for an Indiana "For-Hire Pesticide Applicator License" in either category 3a Ornamental Pest Management, or 3b Turf Management. *(Information available from the Office of the Indiana State Chemist - Pesticide Section)*

REQUIRED PROFESSIONAL EXPERIENCE: Complete a minimum of 320 hours of work experience in turf and/or landscape horticulture.

Disclaimer

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Minor

Horticulture Minor

Requirements for the Minor (16 credits)

Required Courses (7 credits)

- HORT 10100 - Fundamentals Of Horticulture
- HORT 11000 - Survey Of Horticulture
- HORT 20100 - Plant Propagation

Selective Courses (9 credits)

- HORT 21700 - Woody Landscape Plants
- HORT 21810 - Flowers For Color
- HORT 21820 - Hardy Herbaceous Landscape Plants
- HORT 22200 - DynaSCAPE Applications In Horticulture
- HORT 22400 - Photoshop Applications In Horticulture
- HORT 29100 - Selected Topics In Horticulture
- HORT 30100 - Plant Physiology
- HORT 30600 - History Of Horticulture
- HORT 31700 - Landscape Contracting And Management
- HORT 31800 - Field Production Of Horticultural Crops
- HORT 31900 - Controlled Environment Production Of Horticultural Crops
- HORT 36000 - Flower Arrangement And Indoor Plant Management
• HORT 37000 - Professional Floral Design
• HORT 40300 - Tropical Horticulture
• HORT 42700 - Horticulture Capstone
• HORT 43500 - Principles Of Marketing And Management For Horticultural Businesses
• HORT 45000 - In The English Landscape: Integrating History, Horticulture, and Landscape Architecture
• HORT 49100 - Special Assignments In Horticulture
• HORT 50600 - Commercial Grape And Wine Production
• HORT 51300 - Nutrition Of Horticulture Crops
• HORT 52500 - The Plant Microbiome
• HORT 54100 - Postharvest Technology Of Fruits And Vegetables
• HORT 55300 - Plant Growth And Development
• HORT 59000 - Special Studies In Horticulture
• SFS 21000 - Small Farm Experience I
• SFS 21100 - Small Farm Experience II

Note

• Departmental permission is not required to enroll in this minor.

Disclaimer

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Landscape and Turf Minor

Requirements for the Minor (13 Credits)

Required Courses (10 credits)

• HORT 10100 - Fundamentals Of Horticulture
• HORT 21000 - Fundamentals Of Turfgrass Culture
• HORT 21100 - Fundamentals Of Turfgrass Culture Laboratory
• LA 10110 - Survey Of Landscape Architecture
• LA 16100 - Land And Society

Selective Course (3 credits)

• HORT 21700 - Woody Landscape Plants
• HORT 21810 - Flowers For Color
• HORT 21820 - Hardy Herbaceous Landscape Plants

Notes

• Departmental permission is not required to enroll in this minor.
• Students in the following major/concentrations cannot obtain a Landscape and Turf Minor:
Landscape Management Minor

Requirements for the Minor (12-13 credits)

Required Courses (9-10 credits)

• HORT 10100 - Fundamentals Of Horticulture
• HORT 31700 - Landscape Contracting And Management
• HORT 21700 - Woody Landscape Plants or
• HORT 21810 - Flowers For Color or
• HORT 21820 - Hardy Herbaceous Landscape Plants

Selective Course (3 credits)

• HORT 20100 - Plant Propagation
• HORT 21700 - Woody Landscape Plants *
• HORT 21810 - Flowers For Color *
• HORT 21820 - Hardy Herbaceous Landscape Plants *

• ENTM 41000 - Applied Insect Biology and
• ENTM 41001 - Insects Of Urban Landscapes

Notes

• Departmental permission is not required to enroll in this minor.
• *HORT 21700, HORT 21810, and HORT 21820 can only be used as a selective, if not used as the Plant Materials course above.
• Students in the following majors/concentrations cannot obtain a Landscape Management Minor:
• Horticulture/Landscape Enterprise Management
• Horticulture/Landscape Contracting Management
• Horticulture/Landscape Design
• Horticulture/Landscape Horticulture and Design

Disclaimer
The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

**Turf Management Minor**

Requirements for the Minor (13 credits)

Required Courses (10 Credits)

- AGRY 25500 - Soil Science
- AGRY 51000 - Turfgrass Science
- HORT 21000 - Fundamentals Of Turfgrass Culture
- HORT 21100 - Fundamentals of Turfgrass Culture Laboratory

Selective Course - Choose One (3 Credits)

- AGRY 36500 - Soil Fertility
- AGRY 51200 - Integrated Turfgrass Systems
- AGRY 51400 - Environmental Stress Management For Turfgrass
- ENTM 41000 - Applied Insect Biology
- ENTM 41001 - Insects Of Urban Landscapes

**Notes**

- Departmental permission is not required to enroll in this minor.
- Students in the following majors/concentrations cannot obtain a Turf Management Minor:
  - Turf Management and Science

**Disclaimer**

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

**Pre-Program**

**Pre-Landscape Architecture**

See the program Landscape Architecture, BSLA for information.

**Fall 1st Semester**

- AGR 10100 - Introduction To The College Of Agriculture And Purdue University
- AGR 12000 - Introduction To Horticulture And Landscape Architecture Academic Programs
- BIOL 11000 - Fundamentals Of Biology I
• LA 11600 - Graphic Communication For Students Of Landscape Architects And Design
• LA 16100 - Land And Society

• ENGL 10600 - First-Year Composition or
• ENGL 10800 - Accelerated First-Year Composition or
• HONR 19903 - Interdisciplinary Approaches In Writing

14-15 Credits

Spring 2nd Semester

• LA 21600 - Landscape Architectural Design I ♦
• MA 15800 - Precalculus- Functions And Trigonometry

• BIOL 11100 - Fundamentals Of Biology II or
• BTNY 11000 - Introduction To Plant Science

• COM 11400 - Fundamentals Of Speech Communication or
• COM 21700 - Science Writing And Presentation or
• EDPS 31500 - Collaborative Leadership: Interpersonal Skills

• Art and Design Selective - Credit hours: 3.00

16 Credits

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.