Poultry Science (BS): Technology Concentration

Curricula

Students desiring a Bachelor of Science degree with a major in Poultry Science may choose either the science or technology curriculum offered by the Prestage Department of Poultry Science. Students interested in research or veterinary/medical fields can meet the pre-requisites for these professional schools through the science concentration. These students are also better prepared for advanced study in various disciplines such as genetics, nutrition, physiology, and pathology. The technology curriculum in Poultry Science allows a greater selection of courses in business and economics; and offers a student both basic and applied knowledge in poultry production which can be utilized in the poultry or allied industries upon graduation. One may obtain a double major in other curricula through careful use of electives and/or summer school attendance. These students should consult the undergraduate advisers in the department(s) concerned.

Career Opportunities

The transition from small farm to large commercial poultry operations has created more specialized positions than there are available poultry science graduates. Production-oriented positions and off-the-farm operations in areas such as processing and distribution offer new job opportunities. Allied industries such as: feed manufacturing, equipment sales, financing, pharmaceutical development and research — need additional employees trained in Poultry Science. Graduates are employed in the communication and public relations sectors, as teachers, and extension and research specialists and as veterinarians.

Contact

Dr. Lynn Worley-Davis 919.515.6852 lwdavis@ncsu.edu

Plan Requirements

| Code | Title Ho | ours |
|---------------------------------|---------------------------------------------------|------|
| Orientation | | |
| PO 290 | Exploring Opportunities in Poultry Science | 2 |
| Communication | s | |
| ENG 101 | Academic Writing and Research 1 | 4 |
| COM 110 | Public Speaking | 3 |
| or COM 112 | Interpersonal Communication | |
| Select one of the | following Advanced Communication courses: | 3 |
| ENG 331 | Communication for Engineering and Technology | |
| ENG 332 | Communication for Business and Management | |
| ENG 333 | Communication for Science and Research | |
| Social Sciences | & Business | |
| ARE 201 | Introduction to Agricultural & Resource Economics | 3 |
| Business/Finance | e Elective (p. 2) | 6 |
| Physical and Biological Science | | |
| MA 107 | Precalculus I | 3 |
| | | |

| Select one of the following Math Electives: | | 3 |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---|
| MA 114 | Introduction to Finite Mathematics with Applications | |
| MA 121 | Elements of Calculus | |
| MA 131 | Calculus for Life and Management Sciences A | |
| MA 141 | Calculus I | |
| BIO 181 | Introductory Biology: Ecology, Evolution, and Biodiversity | 4 |
| BIO 183 | Introductory Biology: Cellular and Molecular Biology | 4 |
| CH 101 & CH 102 | Chemistry - A Molecular Science and General Chemistry Laboratory ¹ | 4 |
| Select one of the | e following Organic Chemistry courses: | 4 |
| CH 220 & CH 222 | Introductory Organic Chemistry and Organic Chemistry I Lab | |
| CH 221 & CH 222 | Organic Chemistry I and Organic Chemistry I Lab | |
| PY 131 | Conceptual Physics | 4 |
| or PY 211 | College Physics I | |
| GN 301 | Genetics in Human Affairs | 3 |
| or ANS 215 | Agricultural Genetics | |
| MB 351 | General Microbiology | 4 |
| & MB 352 | and General Microbiology Laboratory | |
| Departmental R | Requirements | |
| PO 201 | Poultry Science and Production | 4 |
| & PO 202 | and Poultry Science and Production Laboratory 1 | |
| PO 322 | Muscle Foods and Eggs ¹ | 3 |
| or PO 433 | Poultry Processing and Products | |
| PO 404 | Avian Anatomy and Physiology | 4 |
| PO 415 | Comparative Nutrition ¹ | 3 |
| PO 435 | Poultry Incubation & Breeding 1 | 4 |
| PO 401 | Poultry Diseases ed Electives (p.) 1 | 4 |
| PO-FM Restricte | 1" | 6 |
| PO-FM Electives | s (p.) | 3 |
| GEP Courses | · (letter //actala a record adu/ un de grave du ata/ aca | _ |
| category-require | s (http://catalog.ncsu.edu/undergraduate/gep- ments/gep-humanities/) | 6 |
| category-require | ences (http://catalog.ncsu.edu/undergraduate/gep- ments/gep-social-sciences/) | 3 |
| GEP Health and Exercise Studies (http://catalog.ncsu.edu/ undergraduate/gep-category-requirements/gep-health-exercise- studies/) | | |
| , | ttp://catalog.ncsu.edu/undergraduate/gep-category- | 3 |
| undergraduate/g | inary Perspectives (http://catalog.ncsu.edu/ pep-category-requirements/gep-interdisciplinary- | 6 |
| | wledge (http://catalog.ncsu.edu/undergraduate/gep- | |
| GEP Foundation undergraduate/g | ments/gep-global-knowledge/) (verify requirement) as of American Democracy (http://catalog.ncsu.edu/lep-category-requirements/gep-fad/) (verify | |
| | Proficiency (http://catalog.ncsu.edu/undergraduate/ quirements/world-language-proficiency/) (verify | |
| | | |

Free Electives

| Free Electives (12 Hr S/U Lmt) ² | 15 |
|---------------------------------------------|-----|
| Total Hours | 120 |

Business/Finance Electives

| Code | Title | Hours |
|---------|------------------------------------------------------|-------|
| ACC 210 | Concepts of Financial Reporting | 3 |
| ACC 220 | Introduction to Managerial Accounting | 3 |
| ACC 280 | Survey of Financial and Managerial Accounting | 3 |
| ARE 215 | Small Business Accounting | 3 |
| ARE 301 | Intermediate Microeconomics | 3 |
| ARE 303 | Farm Management | 3 |
| ARE 304 | Agribusiness Management | 3 |
| ARE 306 | Agricultural Law | 3 |
| ARE 309 | Environmental Law & Economic Policy | 3 |
| ARE 311 | Agricultural Markets | 3 |
| ARE 312 | Agribusiness Marketing | 3 |
| ARE 321 | Agricultural Financial Management | 3 |
| ARE 332 | Human Resource Management for Agribusiness | s 3 |
| ARE 336 | Introduction to Resource and Environmental Economics | 3 |
| BUS 225 | Personal Finance | 3 |
| EC 202 | Principles of Macroeconomics | 3 |
| EC 301 | Intermediate Microeconomics | 3 |
| EC 302 | Intermediate Macroeconomics | 3 |
| EC 305 | A Closer Look at Capitalism | 3 |
| EC 336 | Introduction to Resource and Environmental Economics | 3 |
| EC 348 | Introduction to International Economics | 3 |
| MIE 201 | Introduction to Business | 3 |

PO-FM Restricted Electives

| Code | Title | Hours |
|--------|----------------------------------------------------------------------|-------|
| PO 340 | Live Poultry and Poultry Product Evaluation, Grading, and Inspection | 3 |
| PO 410 | Production and Management of Game Birds in Confinement | 3 |
| PO 421 | Commercial Egg Production | 3 |
| PO 424 | Poultry Meat Production | 3 |

PO-FM Electives

| Code | Title | Hours |
|--------|-------------------------------------------------------------------------|-------|
| PO 212 | Poultry and People | 3 |
| PO 325 | Aspects of Animal Welfare | 3 |
| PO 340 | Live Poultry and Poultry Product Evaluation, Grading, and Inspection | 3 |
| PO 410 | Production and Management of Game Birds in Confinement | 3 |
| PO 411 | Agrosecurity | 3 |

| PO 412 | Emerging Topics in Poultry Science | 3 |
|--------|------------------------------------------|-----|
| PO 421 | Commercial Egg Production | 3 |
| PO 424 | Poultry Meat Production | 3 |
| PO 425 | Feed Manufacturing Technology | 3 |
| PO 426 | Feed Manufacturing Technology Laboratory | 1 |
| PO 492 | External Learning Experience | 1-6 |
| PO 493 | Special Problems in Poultry Science | 1-6 |
| PO 495 | Special Topics in Poultry Science | 1-3 |

Semester Sequence

This is a sample.

| Fi | rst | Υ | ea | r |
|----|-----|---|----|---|

| i ii st i cai | | |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------|
| Fall Semester | | Hours |
| PO 290 | Exploring Opportunities in Poultry Science | |
| ENG 101 | Academic Writing and Research | |
| MA 107 | Precalculus I | 3 |
| PO 201 | Poultry Science and Production ¹ | 3 |
| PO 202 | Poultry Science and Production Laboratory 1 | 1 |
| BIO 181 | Introductory Biology: Ecology, Evolution, and Biodiversity | 4 |
| | Hours | 17 |
| Spring Semester | | |
| BIO 183 | Introductory Biology: Cellular and Molecular Biology | 4 |
| COM 110 or COM 112 | Public Speaking or Interpersonal Communication | 3 |
| Select one of the follo | owing: | 3 |
| MA 114 | Introduction to Finite Mathematics with Applications | |
| MA 121 | Elements of Calculus | |
| MA 131 | Calculus for Life and Management Sciences A | |
| MA 141 | Calculus I | |
| GEP Social Sciences | (http://catalog.ncsu.edu/undergraduate/ | 3 |
| gep-category-require | ments/gep-social-sciences/) | |
| Free Elective | | 3 |
| | Hours | 16 |
| Second Year | | |
| Fall Semester | | |
| ARE 201 | Introduction to Agricultural & Resource Economics | |
| CH 101 | Chemistry - A Molecular Science | |
| CH 102 | General Chemistry Laboratory | |
| GEP Humanities (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/) | | 3 |
| | rcise Studies (http://catalog.ncsu.edu/ ategory-requirements/gep-health-exercise- | 1 |
| PO-FM Restricted Ele | ectives (p.) 1 | 3 |
| Free Electives | | 3 |

Hours

17

A grade of C- or higher is required.
 Students should consult their academic advisors to determine which courses fill this requirement.

| Spring Semester | | |
|-----------------------------------------|--------------------------------------------------------------------------------------------|----|
| CH 221 | Organic Chemistry I | |
| CH 222 | Organic Chemistry I Lab | |
| ACC/ARE/BUS/EC | /EC Elective (p. 2) | |
| | http://catalog.ncsu.edu/undergraduate/gepents/gep-humanities/) | 3 |
| Free Electives | | 3 |
| | Hours | 13 |
| Third Year | | |
| Fall Semester | | |
| GN 301 or ANS 215 | Genetics in Human Affairs or Agricultural Genetics | 3 |
| PO/ANS/FS 322 or PO 433 | Muscle Foods and Eggs ¹ or Poultry Processing and Products | 3 |
| PO/ANS 415 | Comparative Nutrition ¹ | 3 |
| ACC/ARE/BUS/EC | Elective (p. 2) | 3 |
| GEP Elective (http://category-requireme | //catalog.ncsu.edu/undergraduate/gep- ents/) | 3 |
| | Hours | 15 |
| Spring Semester | | |
| Select one of the fo | ollowing: | 3 |
| ENG 331 | Communication for Engineering and Technology | |
| ENG 332 | Communication for Business and Management | |
| ENG 333 | Communication for Science and Research | |
| PO 424 | Poultry Meat Production ¹ | 3 |
| PO 425/ ANS 425 / FM 425 | Feed Manufacturing Technology ¹ | 3 |
| PO 435 | Poultry Incubation & Breeding ¹ | 4 |
| | tercise Studies (http://catalog.ncsu.edu/ -category-requirements/gep-health-exercise- | 1 |
| | Hours | 14 |
| Fourth Year | | |
| Fall Semester | | |
| MB 351 | General Microbiology | 3 |
| MB 352 | General Microbiology Laboratory | 1 |
| PO 404 | Avian Anatomy and Physiology | |
| | ry Perspectives (http://catalog.ncsu.edu/ -category-requirements/gep-interdisciplinary- | 3 |
| Free Elective | | 3 |
| Spring Semester | Hours | 14 |
| PO 401 | Poultry Diseases ¹ | 4 |
| PY 131 or PY 211 | Conceptual Physics or College Physics I | |
| | ry Perspectives (http://catalog.ncsu.edu/ -category-requirements/gep-interdisciplinary- | 2 |

| Free Elective | | 4 |
|---------------|-------------|-----|
| | Hours | 14 |
| | Total Hours | 120 |

¹ A grade of C- or higher is required.

Career Opportunities

The transition from small farm to large commercial poultry operations has created more specialized positions than there are available poultry science graduates. Production-oriented positions and off-the-farm operations in areas such as processing and distribution offer new job opportunities. Allied industries such as: feed manufacturing, equipment sales, financing, pharmaceutical development and research — need additional employees trained in Poultry Science. Graduates are employed in the communication and public relations sectors, as teachers, and extension and research specialists and as veterinarians.

Careers

- · Live Operations
- Food Safety
- · Sales and Marketing
- Quality Assurance
- · Nutrition and Feed Manufacturing

Learn More About Careers

NCcareers.org (https://nccareers.org/)

Explore North Carolina's central online resource for students, parents, educators, job seekers and career counselors looking for high quality job and career information.

Occupational Outlook Handbook (https://www.bls.gov/ooh/)
Browse the Occupational Outlook Handbook published by the Bureau of
Labor Statistics to view state and area employment and wage statistics.
You can also identify and compare similar occupations based on your
interests.

Career One Stop Videos (https://www.careeronestop.org/)
View videos that provide career details and information on wages,
employment trends, skills needed, and more for any occupation.
Sponsored by the U.S. Department of Labor.

Focus 2 Career Assessment (https://careers.dasa.ncsu.edu/explore-careers/career-assessments/) (NC State student email address required) This career, major and education planning system is available to current NC State students to learn about how your values, interests, competencies, and personality fit into the NC State majors and your future career. An NC State email address is required to create an account. Make an appointment with your career counselor (https://careers.dasa.ncsu.edu/about/hours-appointments/) to discuss the results.

Focus 2 Apply Assessment (https://www.focus2career.com/Portal/Register.cfm?SID=1929) (Available to prospective students)
A career assessment tool designed to support prospective students in exploring and choosing the right major and career path based on your unique personality, interests, skills and values. Get started with Focus 2 Apply and see how it can guide your journey at NC State.

Ag. Careers (https://www.agcareers.com/)