

MAJOR IN SOIL AND CROP SCIENCES, AGRONOMIC PRODUCTION MANAGEMENT CONCENTRATION

Requirements Effective Fall 2019

Freshman

| | | AUCC | Credits |
|---|--|------|-----------|
| AGRI 192 or 292 | Orientation to Agricultural Systems Transfer Seminar | | 1 |
| AREC 202 | Agricultural and Resource Economics (GT-SS1) | 3C | 3 |
| BZ 120 | Principles of Plant Biology (GT-SC1) | 3A | 4 |
| CHEM 107 | Fundamentals of Chemistry (GT-SC2) | 3A | 4 |
| CHEM 108 | Fundamentals of Chemistry Laboratory (GT-SC1) | 3A | 1 |
| CO 150 | College Composition (GT-CO2) | 1A | 3 |
| MATH 117 | College Algebra in Context I (GT-MA1) | 1B | 1 |
| MATH 118 | College Algebra in Context II (GT-MA1) | 1B | 1 |
| MATH 124 | Logarithmic and Exponential Functions (GT-MA1) | 1B | 1 |
| SOCR 100 | General Crops | | 4 |
| Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives) | | 3D | 3 |
| Electives | | | 4 |
| Total Credits | | | 30 |

Sophomore

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|--|--|----|-----------|
| BZ 223 | Plant Identification | | 3 |
| LAND 220/LIFE 220 | Fundamentals of Ecology (GT-SC2) | 3A | 3 |
| PH 110 | Physics of Everyday Phenomena (GT-SC2) | 3A | 3 |
| PHIL 110 | Logic and Critical Thinking (GT-AH3) | 3B | 3 |
| SOCR 240 | Introductory Soil Science | | 4 |
| SPCM 200 | Public Speaking | | 3 |
| Diversity and Global Awareness (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-global-awareness) | | 3E | 3 |
| Electives | | | 8 |
| Total Credits | | | 30 |

Junior

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|--------------------------------|---|---|---|
| BZ 440 | Plant Physiology | | 3 |
| BZ 441 | Plant Physiology Laboratory | | 2 |
| Select one from the following: | | | 3 |
| BUS 300 | Business Writing and Communication (GT-CO3) | 2 | |
| CO 300 | Writing Arguments (GT-CO3) | 2 | |
| CO 301B | Writing in the Disciplines: Sciences (GT-CO3) | 2 | |
| JTC 300 | Strategic Writing and Communication (GT-CO3) | 2 | |
| SOCR 330 | Principles of Genetics | | 3 |
| SOCR 350 | Soil Fertility Management | | 3 |
| SOCR 351 | Soil Fertility Laboratory | | 1 |

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|---|---|----|-----------|
| SOCR 370 | Climate-Smart Irrigation Principles | | 2 |
| Select one course from the following: | | | 3 |
| STAT 201 | General Statistics (GT-MA1) | 1B | |
| STAT 301 | Introduction to Applied Statistical Methods | | |
| STAT 307 | Introduction to Biostatistics | | |
| Agricultural and Resource Economics Elective ¹ | | | 3 |
| Department Electives (select from list below) | | | 6 |
| Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities) | | | 3 |
| Total Credits | | | 32 |

Senior

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| BSPM 302 | Applied and General Entomology | | 2 |
| BSPM 303C | Entomology Laboratory: Agricultural | | 1 |
| BSPM 308 | Ecology and Management of Weeds | | 3 |
| BSPM 361 | Elements of Plant Pathology | | 3 |
| Select two courses from the following: | | | 6-7 |
| SOCR 320 | Sustainable Forage Management for Livestock | | |
| SOCR 322 | Principles of Microclimatology | | |
| SOCR 430 | | | |
| SOCR 440 | Pedology | | |
| SOCR 455 | Microbiomes of Soil Systems | | |
| SOCR 460/HORT 460 | Plant Breeding and Biotechnology | | |
| SOCR 371 | Irrigation of Field Crops | | 1 |
| SOCR 377 | Geographic Information Systems in Agriculture | | 3 |
| SOCR 421 | Agroecosystem Management | 4A,4B,4C | 4 |
| SOCR 486 or 487 | Practicum Internship | | 1 |
| SOCR 492 | Preparing for Impact--Your Career Journey | 4A | 1 |
| Agricultural and Resource Economics Elective ¹ | | | 3 |
| Department Electives (select from list below) | | | 0-4 |
| Total Credits | | | 28-32 |

Program Total Credits: 120

Department Electives

Soil and Crop Sciences electives are required for the Agronomic Production Management Concentration. Choose any combination of the following suggested courses to meet this requirement.

| Code | Title | Credits |
|-------------------|--|---------|
| BC 463 | Molecular Genetics | 3 |
| BSPM 450 | Molecular Plant-Microbe Interaction | 3 |
| BSPM 451 | | 3 |
| BZ 346 | Population and Evolutionary Genetics | 3 |
| BZ 441 | Plant Physiology Laboratory | 2 |
| BZ 476/BZ 576 | Genetics of Model Organisms | 3 |
| FSHN 125 | Food and Nutrition in Health | 2 |
| FSHN 150 | Survey of Human Nutrition | 3 |
| HORT 401 | Medicinal and Value-Added Uses of Plants | 3 |
| HORT 424/SOCR 424 | Topics in Organic Agriculture | 3 |
| HORT 451 | Vegetable Crop Management | 3 |
| MIP 300 | General Microbiology | 3 |
| MIP 450 | Microbial Genetics | 3 |

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| SOCR 200 | Seed Anatomy and Identification | 1 |
| SOCR 201 | Seed Development and Metabolism | 1 |
| SOCR 300 | Seed Purity Analysis | 2 |
| SOCR 301 | Seed Germination and Viability | 2 |
| SOCR 410 | Seed Processes: Storage and Deterioration | 1 |
| SOCR 412 | Seed Processes: Separation and Conditioning | 1 |

¹ Select from department list of Agricultural and Resource Economics Electives.