Sustainable Food and Farming
Bachelor of Science Online Degree Requirements

For students who joined the program prior to September 2023

The Bachelor of Sciences degree in Sustainable Food and Farming requires students to take courses in four categories:

a. University General Education Requirements (45 credits)
b. Core Required Classes (26-31 credits)
c. Agricultural Science and Practice Classes (24 credits)
d. Professional Electives (20 credits)

The following is a breakdown of which classes are currently available online and which are in the planning stage.

1. University General Education Requirements
The University GenEd requirements are:

- College Writing (CW) 3 credits (ENGLWRIT 112)
- General Mathematics (R1) 3 credits
- Analytical Reasoning (R2) 3 credits
- Biological Science (BS) 4 credits
- Physical Sciences (PS) 4 credits
- Arts or Literature (AT or AL) 4 credits
- Historical Studies (HS) 4 credits
- Social & Behav. Sci. (SB) 4 credits
- Social World (AT, AL, I, SI) 4 credits
- U.S. Diversity (DU) 3 credits (may be combined with another GenED)
- Global Diversity (DG) 3 credits (may be combined with another GenED)

There are online options for all of the above required General Education classes. In addition, some students will transfer courses from previous college work or may fulfill these requirements at a community college.

Two additional General Education classes are taken within the Sustainable Food and Farming major:

- **Junior Writing** - STOCKSCH 382 - Professional Development in Sustainable Food and Farming (3) – Online summer session II
- **Integrative Experience** - STOCKSCH 379 - Ag Systems Thinking (3) - Online winter term

2. Core Required Classes

These classes are required of students earning a Bachelor of Sciences degree in the Stockbridge School of Agriculture. There is some flexibility depending on a student’s career goals and previous course work.

A. Botany - STOCKSCH 108 - Intro to Botany (4) – Summer and Fall

B. Soil Science - STOCKSCH 106 - Soil Science and Management (3) - Summer and Fall

C. Ecosystem Course – Choose one:

- STOCKSCH 186 - Introduction to Permaculture (3) – Spring
- STOCKSCH 378 - Agroecology (3) – Spring
- STOCKSCH 510 – Management and Ecology of Plant Diseases (3)
D. Mathematics Requirements - MATH 104 - Alg/Anal Geo/Trig (3) or MATH 101 (2) and MATH 102 (2)

E. Analytical Reasoning – University approved R2 - Analytical Reasoning Class (3) available online

F. Chemistry Requirement - STOCKSCH 117 - Agricultural Chemistry (3) - Winter

G. Take one course in food/land policy

- STOCKSCH 288 – Land Use Policies & Sustainable Farming (3) – Summer
- STOCKSCH 297 FL – Intro to Food and Agricultural Law
- STOCKSCH 355 - Community Food Systems (3) – Summer
- STOCKSCH 356 – Food Justice and Policy
- STOCKSCH 387 – Global Food Systems (3) – Spring
- STOCKSCH 397R – Social Permaculture for Food Justice (3) – Spring

3. Agricultural Science and Practice Classes

Students must take 24 credits in agricultural science and practice. These courses may be taken in the Stockbridge School of Agriculture or other departments with approval of the adviser.

- Review credit break-down below:

100 Level Classes (6 credits may count toward the major from this list and anything over 6 counts towards Professional Electives)

- STOCKSCH 100 – Botany for Gardeners (4) – Winter and Summer
- STOCKSCH 110 – Sustainable Horticulture (3) – Fall
- STOCKSCH 119 – Backyard Homesteading (3) – Fall
- STOCKSCH 120 – Organic Farming and Gardening (4) – Summer
- STOCKSCH 166 – Practical Beekeeping(3)–Fall
- STOCKSCH 186 – Introduction to Permaculture (3) – Spring
- STOCKSCH 172 – Plants in Our World (4) – Summer and Fall
- STOCKSCH 190 P – Pastured Poultry (3) – Spring

200 - 400 Level Classes (at least 12 credits may count toward the major from this list)

- STOCKSCH 211 – Pasture Management (3) – Spring
- STOCKSCH 258 – Urban Agriculture (3) - Summer
- STOCKSCH 261 – Topics in Herbalism (2 cr) – Summer
- STOCKSCH 265 - Sustainable Agriculture (3) – Summer
- STOCKSCH 266 – Farm Management, Planning and Marketing (3) – Spring
- STOCKSCH 268 · Raising Cows, Sheep & Goats (3)
- STOCKSCH 269 · Small Farm Husbandry: Pigs and Poultry (3) – Fall
- STOCKSCH 280 · Herbs, Spices and Medicinal Plants (4) – Fall
- STOCKSCH 288 – Land Use Policies & Sustainable Farming (3) – Summer, even yrs
- STOCKSCH 290 F – Holistic Fruit Production (3) - Spring
- STOCKSCH 290 HP – Industrial Hemp Production (Summer, pending approval)
- STOCKSCH 290 M – Integrated Pest Management
- STOCKSCH 297 AL – Agricultural Leadership and Community Education (3) – Summer
- STOCKSCH 297 FL – Intro to Food and Agricultural Law (3) Winter
- STOCKSCH 297 PA – Pastured Poultry (3) Spring
- STOCKSCH 320 – Organic Vegetable Production (3) – Summer and Fall
- STOCKSCH 322 – Post-harvest Handling of Fruits & Vegetables (3) Winter
- STOCKSCH 354 – Non-Profit Management for Community Food Programs (3) Winter
- STOCKSCH 355 – Community Food Systems (3) – Summer, odd yrs
- STOCKSCH 356 – Food Justice and Policy (3) Summer, even years
• STOCKSCH 365 – Hydroponics & Aquaponics (3) – Fall
• STOCKSCH 378 - Agroecology (3) – Spring
• STOCKSCH 379 – Agricultural Systems Thinking (3) Winter
• STOCKSCH 386 – Sustainable Site Planning and Design (3) – Fall
• STOCKSCH 387 – Global Food Systems (3) – Spring
• STOCKSCH 390G – Sustainable Grape Production (2) – Winter
• STOCKSCH 397D – Integrated Pest Management (3) – Fall
• STOCKSCH 397 FJ – Social Permaculture for Food Justice (3) Spring
• STOCKSCH 397 PB – Pollinator Biology and Habitat (1) Winter
• STOCKSCH 397R – Social Permaculture for Food Justice (3) – Spring
• STOCKSCH 398 B – Agricultural Practicum (1-18 credits) – available year round
• STOCKSCH 497 D – Sustainable Site Design (2) – Winter

500 Level Classes (at least 6 credits required from this list or other departments with approval)

• STOCKSCH 510 – Management and Ecology of Plant Disease (3)
• STOCKSCH 580 – Soil Fertility (3)
• STOCKCH 587 - Phyto/Bioremediation (3)
• STOCKSCH 596 – Independent Study (3)

4. Professional Electives

Students working closely with an academic adviser are encouraged to select professional elective courses from the major or other UMass majors which help them move toward their own career goals. General Education classes, one credit Stockbridge classes, transfer courses, independent study and practicum classes may be used to fulfill this requirement.

A total of 18 credits of approved courses are required with at least one course from each category below:

1. Biophysical Systems
2. Economic Systems
3. Social Systems

This category ensures that all three aspects of sustainability (environmental, economic and equity) are included in the course of study. The following programs offer courses that may fulfill these categories:

• Accounting • Finance • Public Health
• Animal Sciences • Geology • Regional Planning
• Biology • Legal Studies • Resource Economics
• Building/Const. Tech • Management • Sustainable Communities
• Economics • Marketing • Women, Gender and Sexuality Studies
• Education • Nutrition

5. Internships or Practicum

Students are encouraged to take up to the maximum of 18 credits as Internships or Practicum which may be counted toward Professional Electives. These may be farm internships, working with non-profits or businesses, or study abroad. Stockbridge is committed to helping students gain practical experience as part of their major area of study. By combining your classroom education with experience in the field, your practicum/internship should be a highlight of your Stockbridge education. Every internship is different and one size does not fit all! The requirements have flexibility. If you are working to establish your own farm and your life situation is such that you are not able to complete an independent study away from home, we can find a “residential solution.”

For more information, talk with our SFF Internship Coordinator, Renee Ciulla at rciulla@umass.edu. And see: https://sustfoodfarm.org/internship/
Summary

To graduate, students must take the following minimum number of classes:

- University classes = 120 credits
- College of Natural Science classes (includes Stockbridge) = 60 credits
- Stockbridge School of Agriculture classes = 30 credits