

# AGROECOLOGY, M.S.

Created in 2007, the Agroecology M.S. program at UW–Madison trains students to research and analyze agricultural systems within a broader environmental and socioeconomic context. Key to this endeavor is interdisciplinary expertise, which the agroecology program achieves through working with affiliated faculty members from nearly 20 departments across campus.

A typical cohort consists of 8–12 incoming students with diverse backgrounds and undergraduate majors. Agroecology M.S. students work with faculty on focused projects across a wide range of the traditional departments of the academy. Our core curriculum brings together these students for a multidisciplinary, agroecological, analysis of agricultural systems in a broadened context.

The agroecology program is supported by the interdisciplinary agroecology cluster, which hired three faculty members in 2002: Michael Bell in community and environmental sociology, Claudio Gratton in entomology, and Randall Jackson in agronomy. These faculty, all still active in the program, were the catalyst for what is now a group of more than 50 faculty affiliates who advise agroecology students and participate in program governance.

The cluster concept is an innovation of the University of Wisconsin in which a core group of faculty is hired into an interdisciplinary area, but have tenure homes in traditional departments.

## PROGRAM TRACKS

- The public practice track trains facilitators to enable broader discussion and negotiation at the interfaces of agriculture and other sectors of society. The goal of this "action-in-society" track is to train analysts to increase understanding about the roles of agricultural systems in multi-functional landscapes, and the public policy that shapes these roles.
- The research track addresses the need for continued research and scholarship in order that discussions and negotiations are well informed. Students will have the opportunity to obtain experience in the scholarship of original research, culminating in the writing of a thesis.

## ADMISSIONS

### GRADUATE SCHOOL ADMISSIONS

Graduate admissions is a two-step process between academic degree programs and the Graduate School. Applicants must meet requirements of both the program(s) and the Graduate School. Once you have researched the graduate program(s) you are interested in, apply online (<https://grad.wisc.edu/admissions>).

Requirements	Detail
Fall Deadline	December 15
Spring Deadline	The program does not admit in the spring.
Summer Deadline	The program does not admit in the summer.
GRE (Graduate Record Examinations)	Not required.

**English Proficiency Test** Every applicant whose native language is not English or whose undergraduate instruction was not in English must provide an English proficiency test score and meet the Graduate School minimum requirements (<https://grad.wisc.edu/apply/requirements/#english-proficiency>).

**Other Test(s) (e.g., GMAT, MCAT)** n/a

**Letters of Recommendation Required** 3

## ADMISSIONS AND FREQUENTLY ASKED QUESTIONS

The agroecology program accepts students from a wide range of undergraduate majors, not limited to the social and natural sciences. Because the admissions process is highly competitive, applicants should have a record of strong grades, agroecology-relevant interests and experience, and a commitment to learning in a multidisciplinary program. The deadline for fall semester applications is December 15. Inquiries at other times may be considered.

The initial application process is outlined below. Prospective students should keep in mind, however, that this document-based application is only the first step in the admissions process. Students who are deemed admissible on the merits of these documents must then identify an academic advisor and a plan for funding to be fully admitted. The agroecology program will assist students in this endeavor. More information on the process of seeking out funding and an advisor is available in the program's Student Handbook (<https://agroecology.wisc.edu/documents/agroecology-handbook>). Students who are interested in applying should contact the program administrator.

### SUBMIT THE FOLLOWING TO THE UW–MADISON GRADUATE SCHOOL:

- Online application and application fee.
- International applicants whose native language is not English are required to take the TOEFL or IELTS. All test scores must be submitted electronically by the Educational Testing Service to UW–Madison (ETS code 1846). Copies or faxes cannot be accepted.
- Three letters of recommendation. When completing the online application, submit the names and email addresses of three people who will provide letters of recommendation. They will receive instructions on how to upload their letters.

### SUBMIT THE FOLLOWING TO THE AGROECOLOGY PROGRAM ADMINISTRATOR:

- Electronically, a one-page Statement of Purpose. In the statement, students should describe their interests and goals and which UW–Madison faculty members they would like to work with. In addition, students should identify which program track they plan to pursue—Research or Public Practice—and state why they are interested in this option. Knowing students' intentions will help the program better understand their academic and career goals. Finally, students should indicate if they intend to pursue a Ph.D. degree after completing the master's in agroecology. Although funding isn't guaranteed, some fellowships require that students intend to continue at the Ph.D. level.
- Electronically, a curriculum vitae.

- Two official copies of transcripts for all undergraduate work (and graduate, if relevant). Many schools are able to send electronic versions of official transcripts directly to the program administrator. Electronic versions are preferred. Please do not send transcripts to the Graduate School.

Frequently asked questions regarding the graduate program are available on the agroecology website (<https://agroecology.wisc.edu/apply>).

## FUNDING

## GRADUATE SCHOOL RESOURCES

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (<https://grad.wisc.edu/funding>) is available from the Graduate School. Be sure to check with your program for individual policies and processes related to funding.

## REQUIREMENTS

### MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (<http://guide.wisc.edu/graduate/#policiesandrequirements>), in addition to the program requirements listed below.

### MAJOR REQUIREMENTS

#### MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

#### Mode of Instruction Definitions

**Evening/Weekend:** These programs are offered in an evening and/or weekend format to accommodate working schedules. Enjoy the advantages of on-campus courses and personal connections, while keeping your day job. For more information about the meeting schedule of a specific program, contact the program.

**Online:** These programs are offered primarily online. Many available online programs can be completed almost entirely online with all online programs offering at least 50 percent or more of the program work online. Some online programs have an on-campus component that is often designed to accommodate working schedules. Take advantage of the convenience of online learning while participating in a rich, interactive learning environment. For more information about the online nature of a specific program, contact the program.

**Hybrid:** These programs have innovative curricula that combine on-campus and online formats. Most hybrid programs are completed on-campus with a partial or completely online semester. For more information about the hybrid schedule of a specific program, contact the program.

**Accelerated:** These on-campus programs are offered in an accelerated format that allows you to complete your program in a condensed time-frame. Enjoy the advantages of on-campus courses with minimal disruption to your career. For more information about the accelerated nature of a specific program, contact the program.

## CURRICULAR REQUIREMENTS

### Requirements Detail

Minimum Credit Requirement 34 credits

Minimum Residence Credit Requirement 16 credits

Minimum Graduate Coursework Requirement 23 out of 34 total credits must be completed in graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university's Course Guide (<https://public.my.wisc.edu/web/expanded>). Please refer to Agroecology Learning Plans.

Overall Graduate GPA Requirement 3.00 GPA required.

Other Grade Requirements Students must earn a B or above in all core curriculum coursework.

Assessments and Examinations The research track requires a formal thesis and public defense; the public practice track requires a comprehensive report and public presentation.

Language Requirements No language requirements.

### REQUIRED COURSES

#### Research Track <sup>1</sup>

Code	Title	Credits
<b>Core Curriculum</b>		
AGROECOL 720	Agroecology Field Study	1
AGROECOL/ AGRONOMY/ ENVIR ST 724	Agroecosystems and Global Change <sup>2</sup>	3
AGROECOL 702	The Multifunctionality of Agriculture	3
AGROECOL 710	Agroecology Seminar <sup>3</sup>	3
<b>Cross Training Electives <sup>4</sup></b>		12

Students will select courses to fulfill their cross-training electives in the categories below. Per Graduate School requirements, at least 5 of the 12 cross training electives must be from UW-Madison at the 700 level or above OR from UW-Madison courses in the 300-699 range that have the "graduate attribute." By time of graduation, the student will have taken courses in:

#### Ecology

The following are examples of courses in this category:

BOTANY/ F&W ECOL/ ZOOLOGY 460	General Ecology
ENVIR ST 506	Modeling and Analysis of Environmental Systems
AGRONOMY/ BOTANY/ SOIL SCI 370	Grassland Ecology

#### Social Science

The following are examples of courses in this category:

C&E SOC or A A E courses on food systems, agricultural technology, the agricultural environment, or agricultural policy

**Data Analysis**

The following are examples of courses in this category:

Graduate-level GIS, statistics, or qualitative methods course

**Agricultural Science**

The following are examples of courses in this category:

AGRONOMY 300 Cropping Systems  
SOIL SCI 301 General Soil Science

**Research and Thesis**

AGROECOL 990 Research 12

Total Credits 34

<sup>1</sup> These tracks are internal to the program and represent different pathways a student can follow to earn this degree. Track names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

<sup>2</sup> Dr. Chris Kucharik offers AGROECOL/AGRONOMY/ENVIR ST 724 Agroecosystems and Global Change every other fall on odd-numbered years. Professor Kucharik’s AGRONOMY/ATM OCN/ SOIL SCI 532 Environmental Biophysics, offered in even-numbered falls, may serve as a substitute for AGRONOMY/AGROECOL/ ENVIR ST 724 Agroecosystems and Global Change in the Agroecology core course requirements. Additional substitutes are possible at the discretion of the Agroecology Governance Committee but students must request permission through the program manager.

<sup>3</sup> The Seminar in Agroecology is offered both fall and spring semester for 1 credit. Students are encouraged to enroll every semester, but must take at least 3 credits total.

**Public Practice Track <sup>1</sup>**

Code	Title	Credits
<b>Core Curriculum</b>		
AGROECOL 720	Agroecology Field Study	1
AGROECOL/AGRONOMY/ENVIR ST 724	Agroecosystems and Global Change <sup>2</sup>	3
AGROECOL 702	The Multifunctionality of Agriculture	3
AGROECOL 710	Agroecology Seminar <sup>3</sup>	3
<b>Cross Training Electives</b>		18

Students will select courses to fulfill their cross-training electives in each of the four categories below. Per Graduate School requirements, at least 11 of the 18 cross-training electives must be UW–Madison courses at the 700 level or above OR from UW–Madison courses in the 300–699 range that have the “graduate attribute.” By time of graduation, the student will have taken courses in:

**Ecology**

The following are examples of courses in this category:

BOTANY/ F&W ECOL/ ZOOLOGY 460  
ENVIR ST 506 Modeling and Analysis of Environmental Systems

AGRONOMY/ BOTANY/ SOIL SCI 370  
Grassland Ecology

**Social Science**

The following are examples of courses in this category:

C&E SOC or A A E courses on food systems, agricultural technology, the agricultural environment, or agricultural policy

**Community Process**

The following are examples of courses in this category:

PUB AFFR/ POLI SCI/ URB R PL 874  
Policy-Making Process  
URB R PL/A A E/ REAL EST 520  
Community Economic Analysis  
URB R PL 814  
Environmental and Alternative Dispute Resolution in Planning

**Agricultural Science**

The following are examples of courses in this category:

AGRONOMY 300 Cropping Systems  
SOIL SCI 301 General Soil Science

**Project**

AGROECOL 990 Research 6

Total Credits 34

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<sup>3</sup> The Seminar in Agroecology is offered both fall and spring semester for 1 credit. Students are encouraged to enroll every semester, but must take at least 3 credits total.

**POLICIES**

**GRADUATE SCHOOL POLICIES**

The Graduate School’s Academic Policies and Procedures (<https://grad.wisc.edu/acadpolicy>) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

## MAJOR-SPECIFIC POLICIES

### GRADUATE PROGRAM HANDBOOK

The Graduate Program Handbook (<https://agroecology.wisc.edu/documents/agroecology-handbook>) is the repository for all of the program's policies and requirements.

#### Prior Coursework

##### Graduate Work from Other Institutions

With program approval, students are allowed to count no more than 9 credits of graduate coursework from other institutions. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

##### UW–Madison Undergraduate

With program approval, up to 7 credits from UW–Madison numbered 300 or above are allowed to count toward the degree. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

##### UW–Madison University Special

With program approval, students are allowed to count no more than 9 credits of coursework numbered 300 or above taken as a UW–Madison University Special student. Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

## PROBATION

The status of a student can be one of three options:

1. Good standing (progressing according to standards; any funding guarantee remains in place).
2. Probation (not progressing according to standards but permitted to enroll; loss of funding guarantee; specific plan with dates and deadlines in place in regard to removal of probationary status).
3. Unsatisfactory progress (not progressing according to standards; not permitted to enroll, dismissal, leave of absence or change of advisor or program).

## ADVISOR / COMMITTEE

All students are required to submit a learning plan, signed by their advisor, by the end of their second semester. Note: there are separate learning plans for public practice and research tracks.

## CREDITS PER TERM ALLOWED

15 credits

## TIME CONSTRAINTS

Master's degree students who have been absent for five or more consecutive years lose all credits that they have earned before their absence. Individual programs may count the coursework students completed prior to their absence for meeting program requirements; that coursework may not count toward Graduate School credit requirements.

## OTHER

All students must have full funding. Please contact the program administrator.

## PROFESSIONAL DEVELOPMENT

### GRADUATE SCHOOL RESOURCES

Take advantage of the Graduate School's professional development resources (<https://grad.wisc.edu/pd>) to build skills, thrive academically, and launch your career.

## LEARNING OUTCOMES

1. Analyze tradeoffs of different agricultural systems embedded within the greater complexity of socio-ecological systems.
2. Consider and synthesize concepts of systems, ecology, and public process.
3. Learn to engage in careful consideration of the social, economic, and environmental outcomes of different industrial and biological processes.
4. Understand the potential of inclusive participatory processes in research and analysis of agroecological systems.
5. Recognize and apply principles of ethical and professional conduct in their coursework, research, and communications in the field of agroecology.

## PEOPLE

**Faculty:** Alatout, Albrecht, Ane, Arriaga, Barak, Bart, Bell, Bland, Bussan, Casler, Collins, Colquhoun, Cox, Cullen, Davis, Dawson, Dennis, Feinstein, Genskow, Gilbert, Gratton, Groves, Harrington, Hogg, Hueth, Jackson (chair), Kucharik, Luschei, MacGuidwin, Mitchell, Morales, Norman, Ozdogan, Patterson, Picasso, Reinemann, Renz, Rickenbach, Rissman, Ruark, Silva, Steffan, Stoltenberg, Thompson, Tracy, Treves, Ventura, Wattiaux